أسئلة اختيار من متعدد في حل المعادلات

تم تحميل هذا الملف من موقع المناهج الإماراتية	
موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف التاسع المتقدم ⇦ رياضيات ⇦ الفصل الأول ⇦ ملفات متنوعة ⇦ الملف	
تاريخ إضافة الملف على موقع المناهج: 2026-11-07 19:43:32	
ملفات ا كتب للمعلم ا كتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس	المزيد من مادة رياضيات:
إعداد: كرم أسعد	

التواصل الاجتماعي بحسب الصف التاسع المتقدم					
صفحة المناهج الإماراتية على فيسبوك					
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات	

المزيد من الملفات بحسب الصف التاسع المتقدم والمادة رياضيات في الفصل الأول	
1	الهيكل الوزاري 2027 - ريفيل
2	شرح دوال القيمة المطلقة والتحويلات الهندسية
3	هيكل رياضيات 2027 محلول
4	تجميع هيكل ريفيل 2027 بدون حل
5	معدل التغير والدوال الخطية منهج ريفيل

تحميل تطبيق المناهج للهواتف الذكية	
تطبيق المناهج على Store App (آبل)	تطبيق المناهج على Play Google (أندرويد)

ملزمة هيكل 9 متقدم

(ريفيل)

2026-2027

Mathematics

الترم الاول

@MR_KARAM_ASAAD

إعداد

أ / كرم أسعد

لا تتردد في التواصل معنا والاستعداد للامتحان بكل ثقة

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q1	Solve equations involving more than one operation	(1-12)	88

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Use properties of equality to solve each equation. Check your solution.

1

Book #1

1. Solve $3t + 7 = -8$. Check your solution.

(A) $t = -1$ (B) $t = 5$ (C) $t = -15$ (D) $t = -5$

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2

Book #2

2. Solve $8 = 16 + 8n$. Check your solution.

(A) $n = -1$ (B) $n = 1$ (C) $n = -3$ (D) $n = 3$

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3

Book #3

3. Solve $-34 = 6m - 4$. Check your solution.

(A) $m = -5$ (B) $m = -\frac{19}{3} + 1$ (C) $m = -\frac{19}{3}$ (D) $m = 5$

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4 Book #4

4. Solve $9x + 27 = -72$. Check your solution.

(A) $x = 11$ (B) $x = -5$ (C) $x = -11$ (D) $x = -9$

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5 Book #5

5. Solve $\frac{y}{5} - 6 = 8$. Check your solution.

(A) $y = 10$ (B) $y = 14$ (C) $y = -70$ (D) $y = 70$

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6 Book #6

6. Solve $\frac{f}{-7} - 8 = 2$. Check your solution.

(A) $f = -10$ (B) $f = -70$ (C) $f = 70$ (D) $f = 42$

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7 Book #7

7. Solve $1 + \frac{r}{9} = 4$. Check your solution.

(A) $r = -27$ (B) $r = 45$ (C) $r = 3$ (D) $r = 27$

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8 Book #8

8. Solve $\frac{k}{3} + 4 = -16$. Check your solution.

(A) $k = 60$ (B) $k = -36$ (C) $k = -4$ (D) $k = -60$

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9 Book #9

9. Solve $\frac{n-2}{7} = 2$. Check your solution.

(A) $n = 16$ (B) $n = 12$ (C) $n = 9$ (D) $n = -12$

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10 Book #10

10. Solve $14 = \dfrac{6+z}{-2}$. Check your solution.

(A) $z = 34$ (B) $z = -34$ (C) $z = -20$ (D) $z = -22$

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11 Book #11

11. Solve $-11 = \dfrac{a-5}{6}$. Check your solution.

(A) $a = 61$ (B) $a = -71$ (C) $a = -61$ (D) $a = -11$

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12 Book #12

12. Solve $\dfrac{22-w}{3} = -7$. Check your solution.

(A) $w = 43$ (B) $w = 1$ (C) $w = -1$ (D) $w = -43$

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q2	Translate sentences into equations	(1-4)	71

Write an equation for each sentence.

13 Book #1

1. Two added to three times a number m is the same as 18.

(A) $3m - 2 = 18$ (B) $3m + 2 = 18$ (C) $3(m + 2) = 18$ (D) $2m + 3 = 18$

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14 Book #2

2. The product of five and the sum of a number x and three is twelve.

(A) $5x + 3 = 12$ (B) $5 + x + 3 = 12$ (C) $5(x - 3) = 12$ (D) $5(x + 3) = 12$

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15 Book #3

3. The quotient of 24 and x equals 14 minus 2 times x.

(A) $\frac{24}{x} = 14 - 2x$ (B) $\frac{24}{x} = 2x - 14$ (C) $\frac{24}{x} = (14 - 2)x$ (D) $\frac{x}{24} = 14 - 2x$

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16 Book #4

4. Nine times a number y subtracted from 85 is seven times the sum of four and y.

(A) $9y - 85 = 7(4 + y)$

(B) $85 - 9y = 7 \cdot 4 + y$

(C) $85 - 9y = 7 + 4 + y$

(D) $85 - 9y = 7(4 + y)$

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q3	Solve equations with the variable on each side	(1-6)	97

Solve each equation. Check your solution.

17 Book #1

1. Solve $7c + 12 = -4c + 78$.

(A) $c = -6$

(B) $c = \frac{66}{3}$

(C) $c = 6$

(D) $c = \frac{90}{11}$

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18 Book #2

2. Solve $2m - 13 = -8m + 27$.

(A) $m = -4$

(B) $m = \frac{14}{10}$

(C) $m = 4$

(D) $m = -\frac{7}{5}$

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19 Book #3

3. Solve $9x - 4 = 2x + 3$.

(A) $x = \frac{1}{7}$ (B) $x = 1$ (C) $x = -1$ (D) $x = \frac{7}{11}$

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20 Book #4

4. Solve $6 + 3t = 8t - 14$.

(A) $t = 4$ (B) $t = -4$ (C) $t = -\frac{8}{5}$ (D) $t = \frac{8}{11}$

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21 Book #5

5. Solve $\frac{b-4}{6} = \frac{b}{2}$.

(A) $b = 2$ (B) $b = 4$ (C) $b = -4$ (D) $b = -2$

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22 Book #6

6. Solve $\frac{3v+12}{6} = \frac{4v}{3}$.

(A) $v = 4$ (B) $v = -2.4$ (C) $v = 2.4$ (D) $v = 1.5$

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q4	Solve absolute value equations	(19-23)	106

23 Book #19

ENGINEERING *Tolerance* is an allowance made for imperfections in a manufactured object. An oven has a temperature tolerance of $\pm 15°\mathrm{F}$ (the temperature will be within $15°F$ of the set temperature). The thermostat is set to $400°F$. **19.** Which absolute value equation can be used to find the maximum and minimum temperatures?

(A) $|x| - 400 = 15$ (B) $|x - 400| = 15$ (C) $|x + 400| = 15$ (D) $|x - 15| = 400$

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24 Book #19

ENGINEERING Oven set to $400°F$ with tolerance $\pm 15°F$, $|x - 400| = 15$. **19.** What are the minimum and maximum temperatures?

(A) $375°F$ and $425°F$ (B) $390°F$ and $410°F$

(C) $15°F$ and $415°F$ (D) $385°F$ and $415°F$

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25 Book #20

POLLS A poll is accurate within $\pm 5\%$. Candidate A received 38% of the votes in the poll. **20.** Which absolute value equation finds the maximum and minimum percent of voters for Candidate A?

(A) $|x - 5| = 38$

(B) $|x - 38| = -5$

(C) $|x + 38| = 5$

(D) $|x - 38| = 5$

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26 Book #20

POLLS Solve $|x - 38| = 5$ to find the minimum and maximum percent of voters who will vote for Candidate A. **20.**

(A) 35% and 41%

(B) 33% and 43%

(C) 5% and 38%

(D) 30% and 46%

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27 Book #21a

STATISTICS The standard deviation measures how far data are from the mean. On the ACT, the mean mathematics score was 20.9 with a standard deviation of 5.3. **21a.** Which equation gives the maximum and minimum scores within one standard deviation of the mean?

(A) $|x - 20.9| = 5.3$

(B) $|x + 20.9| = 5.3$

(C) $|x - 5.3| = 20.9$

(D) $|x - 20.9| = -5.3$

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28 Book #21a

STATISTICS Mean 20.9, standard deviation 5.3. **21a.** What are the minimum and maximum scores within one standard deviation of the mean?

(A) 5.3 and 20.9

(B) 10.3 and 31.5

(C) 15.6 and 31.5

(D) 15.6 and 26.2

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29 Book #21b

STATISTICS Mean 20.9, standard deviation 5.3. **21b.** What is the range of ACT mathematics scores within <u>two</u> standard deviations of the mean?

(A) $10.3 \leq x \leq 26.2$

(B) $15.6 \leq x \leq 26.2$

(C) $5.3 \leq x \leq 20.9$

(D) $10.3 \leq x \leq 31.5$

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30 Book #22

AVIATION A survey of 4300 students ages 7 to 18 found that **21%** think "finding new resources for Earth" is the most important benefit of future flight. There are about 40 million students in the United States and the margin of error is $\pm 3\%$. **22.** What is the range of the percent of students who would likely say "finding new resources for Earth"?

(A) 18% to 24%

(B) 15% to 27%

(C) 21% to 24%

(D) 18% to 21%

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31 Book #22

AVIATION Using the margin of error $\pm 3\%$ and 40 million students, what is the range of the number of students ages 7 to 18 who would likely say "finding new resources for Earth" is the most important benefit? **22.**

(A) 7.2 million to 8.4 million

(B) 7.2 million to 9.6 million

(C) 8.4 million to 9.6 million

(D) 6.0 million to 12.0 million

مساحة الحل • Working space

32 Book #23

MANUFACTURING A bag of rock salt is labeled 35 pounds. The weight of a packaged bag is within 8 ounces of the label weight (1 lb = 16 oz). **23.** Which equation gives the maximum and minimum weights w in pounds?

(A) $|w - 35| = 8$

(B) $|w - 8| = 35$

(C) $|w - 35| = 0.5$

(D) $|w - 35| = 16$

مساحة الحل • Working space

33 Book #23

MANUFACTURING Solve $|w - 35| = 0.5$. What are the minimum and maximum weights of a bag of rock salt? **23.**

(A) 34.5 lb and 35.5 lb

(B) 34 lb and 36 lb

(C) 34.5 lb and 36 lb

(D) 27 lb and 43 lb

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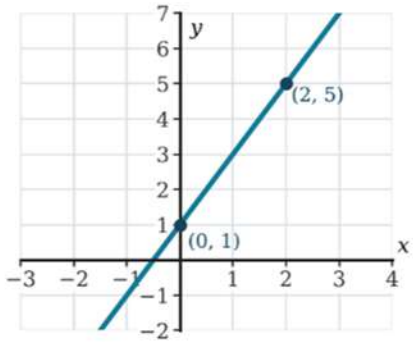
Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q5	Find the slope of a line	(50-52)	227

Find the slope of the line that passes through each pair of points.

34

Book #50

50. The line passes through $(0, 1)$ and $(2, 5)$ (shown). What is its slope?



(A) 2 (B) $\frac{1}{2}$ (C) -2 (D) 4

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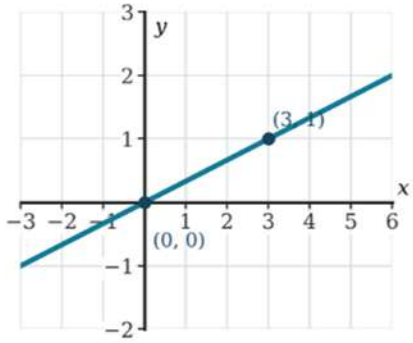
35

Book #51

51. The line passes through $(0, 0)$ and $(3, 1)$ (shown). What is its slope?



(A) 3 (B) $\frac{1}{3}$ (C) $-\frac{1}{3}$ (D) 1

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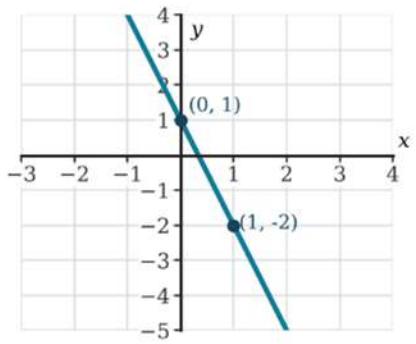
36

Book #52

52. The line passes through $(0, 1)$ and $(1, -2)$ (shown). What is its slope?



(A) 3 (B) -3 (C) $-\frac{1}{3}$ (D) -1

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q6	Solve proportions	(19-26)	113

Solve each proportion. If necessary, round to the nearest hundredth.

37

Book #19

19. Solve $\frac{4v + 7}{15} = \frac{6v + 2}{10}$.

(A) $v = -0.80$ (B) $v = 1.25$ (C) $v = 0.80$ (D) $v = 0.40$

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38

Book #20

20. Solve $\frac{9b-3}{9} = \frac{5b+5}{3}$.

(A) $b = 3$ (B) $b = -1$ (C) $b = -3$ (D) $b = -2$

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39

Book #21

21. Solve $\frac{2n-4}{5} = \frac{3n+3}{10}$.

(A) $n = \frac{11}{5}$ (B) $n = 11$ (C) $n = 1$ (D) $n = -11$

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40

Book #22

22. Solve $\frac{2}{g+6} = \frac{4}{5g+10}$.

(A) $g = 0.67$ (B) $g = 1.50$ (C) $g = 2.00$ (D) $g = -0.67$

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41

Book #23

23. Solve $\frac{x}{3} = \frac{3x+2}{6}$.

(A) $x = -\frac{2}{3}$ (B) $x = -2$ (C) $x = 2$ (D) $x = \frac{2}{3}$

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42

Book #24

24. Solve $\frac{w+3}{7} = \frac{w-1}{8}$.

(A) $w = -1$ (B) $w = -31$ (C) $w = -25$ (D) $w = 31$

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Book #25

25. Solve $\frac{4q-3}{5} = \frac{2q+1}{7}$.

(A) $q = 2.00$ (B) $q = -1.44$ (C) $q = 1.44$ (D) $q = 0.69$

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44

Book #26

26. Solve $\frac{5}{7k+4} = \frac{2}{2k-3}$.

(A) $k = 5.75$ (B) $k = -5.75$ (C) $k = -1.75$ (D) $k = -0.17$

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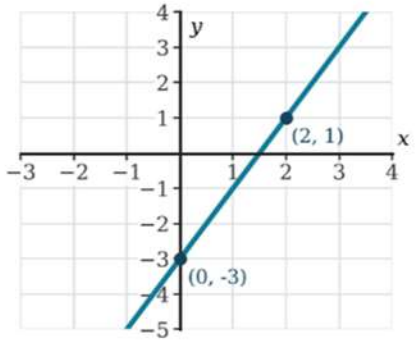
Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q7	Graph and interpret linear functions	(37-39)	236

Write an equation in slope-intercept form for each graph shown.

45

Book #37

37. Which equation in slope-intercept form represents the graph shown (it passes through $(0, -3)$ and $(2, 1)$)?



(A) $y = 2x - 3$ (B) $y = -2x - 3$ (C) $y = 2x + 3$ (D) $y = \frac{1}{2}x - 3$

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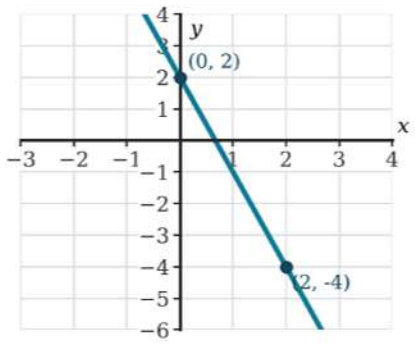
46

Book #38

38. Which equation represents the graph shown (it passes through $(0, 2)$ and $(2, -4)$)?



(A) $y = -\frac{1}{3}x + 2$ (B) $y = -3x + 2$ (C) $y = 3x + 2$ (D) $y = -3x - 2$

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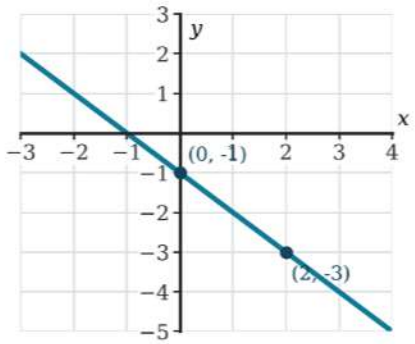
47

Book #39

39. Which equation represents the graph shown (it passes through $(0, -1)$ and $(2, -3)$)?



(A) $y = -2x - 1$ (B) $y = -x + 1$ (C) $y = x - 1$ (D) $y = -x - 1$

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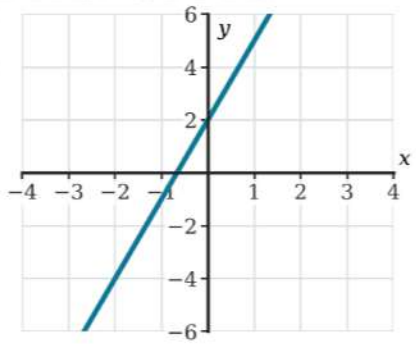
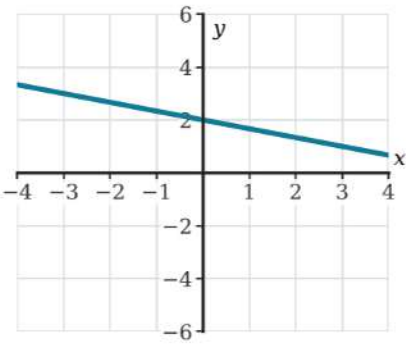
48 Which graph represents $y = -3x + 2$?

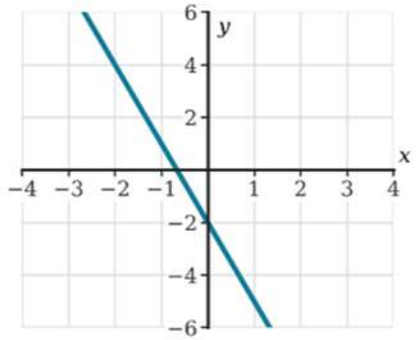
A



B



C



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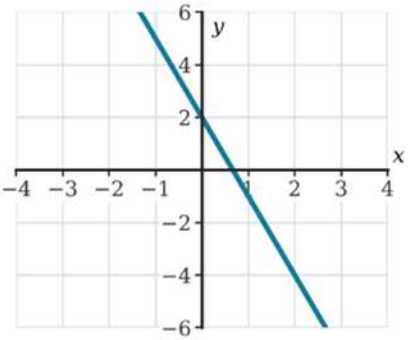

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q8	Apply translations to absolute value functions	EX1	267

49 Describe the translation in $g(x) = |x| - 3$ as it relates to the graph of the parent function $f(x) = |x|$.

A The graph is translated 3 units left.

B The graph is translated 3 units right.

C The graph is translated 3 units down.

D The graph is translated 3 units up.

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50 What is the vertex of the graph of $g(x) = |x| - 3$?

(A) $(0, -3)$ (B) $(0, 3)$ (C) $(3, 0)$ (D) $(-3, 0)$

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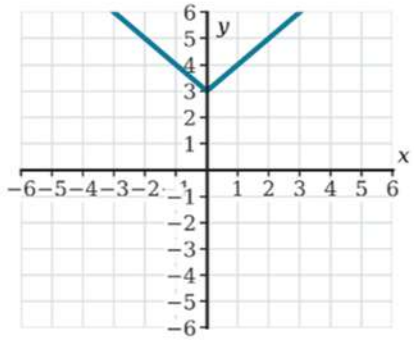
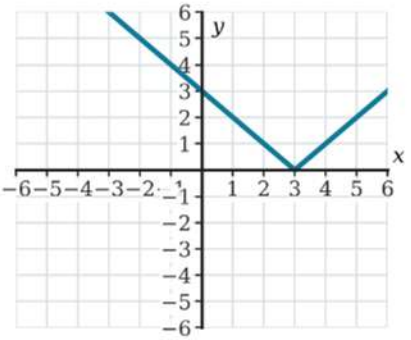
51 Which graph represents $g(x) = |x| - 3$?

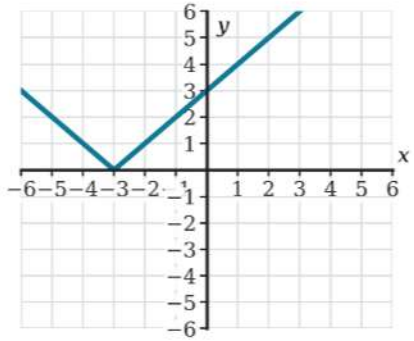
(A)



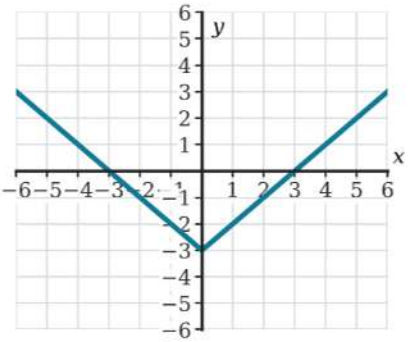
(B)



(C)



(D)



مساحة الحل • Working space

52 What is the range of $g(x) = |x| - 3$?

(A) $g(x) \leq -3$ (B) $g(x) \geq 3$ (C) $g(x) \geq -3$ (D) $g(x) \geq 0$

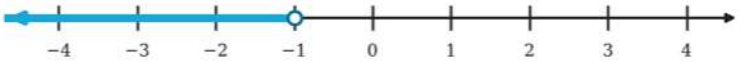
مساحة الحل • Working space

Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q9	Graph the solutions of an inequality	(7-12)	347

Write an inequality that represents each graph.

53 Book #7

7. Which inequality represents the graph shown?

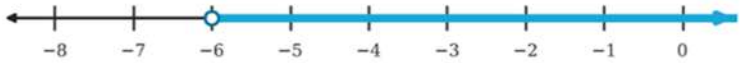


(A) $x < -1$ (B) $x \leq -1$ (C) $x \geq -1$ (D) $x > -1$

مساحة الحل • Working space

54 Book #8

8. Which inequality represents the graph shown?



(A) $x \leq -6$ (B) $x < -6$ (C) $x \geq -6$ (D) $x > -6$

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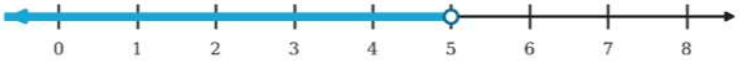
55 Book #9

9. Which inequality represents the graph shown?



(A) $x \geq 5$ (B) $x \leq 5$ (C) $x > 5$ (D) $x < 5$

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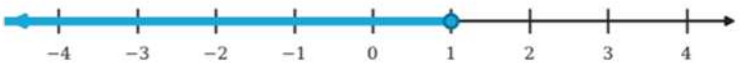
Book #10

10. Which inequality represents the graph shown?



(A) $x < 1$ (B) $x \leq 1$ (C) $x \geq 1$ (D) $x > 1$

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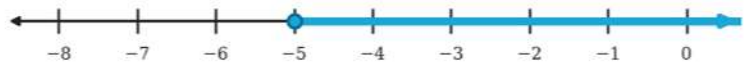
Book #11

11. Which inequality represents the graph shown?



(A) $x \geq -5$ (B) $x < -5$ (C) $x \leq -5$ (D) $x > -5$

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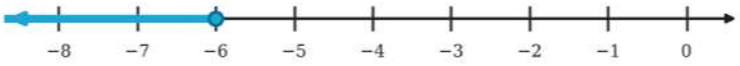
Book #12

12. Which inequality represents the graph shown?



(A) $x \geq -6$ (B) $x < -6$ (C) $x \leq -6$ (D) $x > -6$

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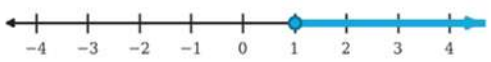
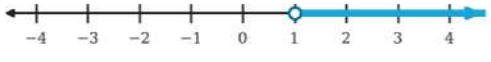
59 Which graph represents $x \leq 1$?

A

B 

C

D 

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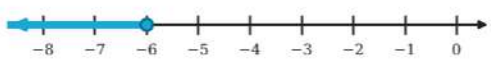
60 Which graph represents $x > -6$?

A 

B

C

D

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q10	Construct arithmetic sequences	(1-8)	255

Determine whether each sequence is an arithmetic sequence. Justify your reasoning.

61 Book #1

1. Is the sequence $-3,\ 1,\ 5,\ 9,\ \ldots$ arithmetic?

A No: the differences are 4, 4, 5

B No: it is a geometric sequence

C Yes: the common difference is –4

D Yes: the common difference is 4

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Book #2

2. Is the sequence $\frac{1}{2}, \frac{3}{4}, \frac{5}{8}, \frac{7}{16}, \ldots$ arithmetic?

(A) Yes: the common difference is –1/8

(B) No: the differences are not the same

(C) No: the differences are all negative

(D) Yes: the common difference is 1/4

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Book #3

3. Is the sequence $-10, -7, -4, 1, \ldots$ arithmetic?

(A) Yes: the common difference is 3

(B) Yes: the common difference is 5

(C) No: the differences are –3, –3, –5

(D) No: the differences are 3, 3, 5

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64

Book #4

4. Is the sequence $-12.3, -9.7, -7.1, -4.5, \ldots$ arithmetic?

(A) Yes: the common difference is 3.1

(B) Yes: the common difference is –2.6

(C) Yes: the common difference is 2.6

(D) No: the differences are 2.6, 2.4, 2.6

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Book #5

5. Is the sequence $4,\ 7,\ 9,\ 12,\ \ldots$ arithmetic?

(A) No: the differences are 3, 2, 3

(B) Yes: the common difference is 2

(C) Yes: the common difference is 3

(D) No: the differences are 3, 3, 2

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66

Book #6

6. Is the sequence $15,\ 13,\ 11,\ 9,\ \ldots$ arithmetic?

(A) Yes: the common difference is −2

(B) No: the differences are −2, −2, −3

(C) Yes: the common difference is 2

(D) Yes: the common difference is −4

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Book #7

7. Is the sequence $7,\ 10,\ 13,\ 16,\ \ldots$ arithmetic?

(A) Yes: the common difference is 7

(B) No: the differences are 3, 3, 4

(C) Yes: the common difference is −3

(D) Yes: the common difference is 3

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68 Book #8

8. Is the sequence $-6,\ -5,\ -3,\ -1,\ \ldots$ arithmetic?

(A) No: the differences are 1, 1, 2

(B) Yes: the common difference is 2

(C) No: the differences are 1, 2, 2

(D) Yes: the common difference is 1

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q11	Solve linear inequalities involving more than one operation	(ex2, ex3) (16-21)	352 354

69

Consider the inequality *The opposite of a number divided by two minus seventeen is less than seven.* **Example 2.** Translate the sentence into an inequality.

(A) $\frac{n}{2} - 17 < 7$

(B) $\frac{-n}{2-17} < 7$

(C) $\frac{-n}{2} - 17 > 7$

(D) $\frac{-n}{2} - 17 < 7$

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70

Example 2. Solve $\frac{-n}{2} - 17 < 7$.

(A) $n > 48$

(B) $n > -48$

(C) $n < 48$

(D) $n < -48$

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71 **Example 3.** Solve $4(2x - 11) \leq -12 + 2(x - 4)$.

(A) $x \geq 4$ (B) $x \leq -4$ (C) $x \leq 4$ (D) $x \leq \frac{16}{3}$

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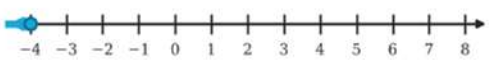
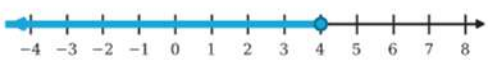
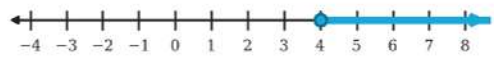
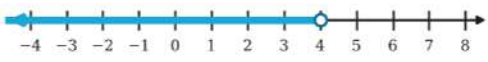
72 **Example 3.** Which graph shows the solution of $4(2x - 11) \leq -12 + 2(x - 4)$?

(A) 

(B) 

(C) 

(D) 

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73 Book #16 **16.** Solve $-3(7n + 3) < 6n$.

(A) $n > -\frac{1}{3}$ (B) $n > \frac{1}{3}$ (C) $n > -3$ (D) $n < -\frac{1}{3}$

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Book #17

17. Solve $21 \geq 3(a-7)+9$.

(A) $a \leq -11$ (B) $a \leq 11$ (C) $a \leq 7$ (D) $a \geq 11$

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Book #18

18. Solve $2y+4>2(3+y)$.

(A) $y<2$ (B) All real numbers

(C) $y>2$ (D) No solution

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Book #19

19. Solve $3(2-b)<10-3(b-6)$.

(A) All real numbers (B) No solution

(C) $b<28$ (D) $b>0$

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Book #20

20. Solve $7 + t \leq 2(t + 3) + 2$.

(A) $t \leq -1$ (B) $t \geq 1$ (C) $t \geq -1$ (D) $t \geq -3$

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78

Book #21

21. Solve $8a + 2(1 - 5a) \leq 20$.

(A) $a \leq -9$ (B) $a \geq -9$ (C) $a \geq -11$ (D) $a \geq 9$

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q12	Solve and graph absolute value inequalities (<)	(1-10)	371

Solve each inequality. Then graph the solution set.

79

Book #1

1. Solve $|x + 8| < 16$.

(A) $-16 < x < 16$ (B) $-8 < x < 16$

(C) $x < -24$ or $x > 8$ (D) $-24 < x < 8$

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80 Book #2

2. Solve $|r + 1| \leq 2$.

(A) $-3 \leq r \leq 1$

(B) $r \leq -3$ or $r \geq 1$

(C) $-1 \leq r \leq 3$

(D) $-2 \leq r \leq 2$

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81 Book #3

3. Solve $|2c - 1| \leq 7$.

(A) $-3 \leq c \leq 8$

(B) $c \leq -3$ or $c \geq 4$

(C) $-3 \leq c \leq 4$

(D) $-4 \leq c \leq 3$

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82 Book #4

4. Solve $|3h - 3| < 12$.

(A) $-3 < h < 15$

(B) $-5 < h < 3$

(C) $h < -3$ or $h > 5$

(D) $-3 < h < 5$

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83

Book #5

5. Solve $|m + 4| < -2$.

(A) No solution

(B) $m < -6$ or $m > -2$

(C) $-6 < m < -2$

(D) All real numbers

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84

Book #6

6. Solve $|w + 5| < -8$.

(A) $-13 < w < 3$

(B) All real numbers

(C) $w < -13$ or $w > 3$

(D) No solution

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85

Book #7

7. Solve $|r + 2| > 6$.

(A) $r < -4$ or $r > 8$

(B) $-8 < r < 4$

(C) $r < -8$ or $r > 4$

(D) $r < -8$ and $r > 4$

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Book #8

8. Solve $|k-4|>3$.

(A) $k<-1$ or $k>7$

(B) $k<1$ or $k>7$

(C) $k<-7$ or $k>-1$

(D) $1<k<7$

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87

Book #9

9. Solve $|2h-3|\geq 9$.

(A) $h\leq -6$ or $h\geq 3$

(B) $h\leq -3$ and $h\geq 6$

(C) $h\leq -3$ or $h\geq 6$

(D) $-3\leq h\leq 6$

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Book #10

10. Solve $|4p+2|\geq 10$.

(A) $p\leq -2$ or $p\geq 3$

(B) $-3\leq p\leq 2$

(C) $p\leq -\frac{3}{2}$ or $p\geq 2$

(D) $p\leq -3$ or $p\geq 2$

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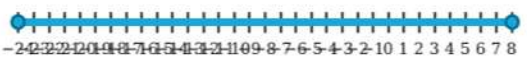
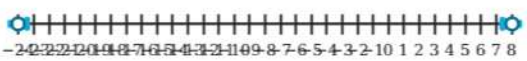
89 Which graph shows the solution set of $|x + 8| < 16$?

A

B 

C

D 

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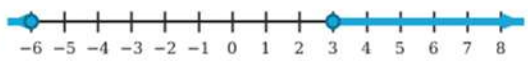
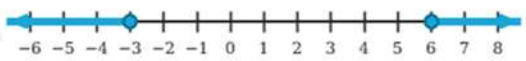
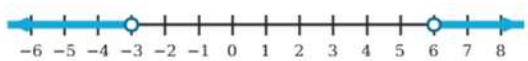
90 Which graph shows the solution set of $|2h - 3| \geq 9$?

A 

B 

C 

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q13	Apply dilations to linear functions	(10-15)	248

Describe the dilation in each function as it relates to the graph of the parent function.

91

Book #10

10. Describe the dilation of $g(x) = 5(x)$ as it relates to the parent function $f(x) = x$.

(A) A vertical translation 5 units up

(B) A vertical compression by a factor of 5

(C) A vertical stretch by a factor of 5

(D) A vertical stretch by a factor of ⅕

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Book #11

11. Describe the dilation of $g(x) = \frac{1}{3}(x)$ as it relates to the parent function $f(x) = x$.

(A) A vertical compression by a factor of 3

(B) A reflection across the *x*-axis

(C) A vertical compression by a factor of ⅓

(D) A vertical stretch by a factor of ⅓

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Book #12

12. Describe the dilation of $g(x) = 1.5(x)$ as it relates to the parent function $f(x) = x$.

(A) A vertical translation 1.5 units up

(B) A vertical stretch by a factor of 1.5

(C) A vertical stretch by a factor of 15

(D) A vertical compression by a factor of 1.5

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94 Book #13

13. Describe the dilation of $g(x) = 3(x)$ as it relates to the parent function $f(x) = x$.

(A) A vertical compression by a factor of 3

(B) A vertical translation 3 units up

(C) A vertical stretch by a factor of 3

(D) A vertical stretch by a factor of ⅓

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95 Book #14

14. Describe the dilation of $g(x) = \left(\frac{3}{4}x\right)$ as it relates to the parent function $f(x) = x$.

(A) A vertical stretch by a factor of ¾

(B) A vertical compression by a factor of 4/3

(C) A vertical compression by a factor of ¾

(D) A horizontal translation ¾ unit right

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96 Book #15

15. Describe the dilation of $g(x) = (0.4x)$ as it relates to the parent function $f(x) = x$.

(A) A vertical translation 0.4 unit down

(B) A vertical compression by a factor of 0.4

(C) A vertical stretch by a factor of 0.4

(D) A vertical compression by a factor of 4

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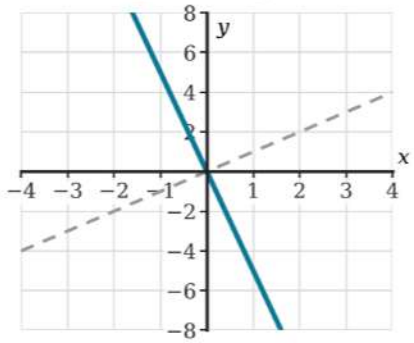
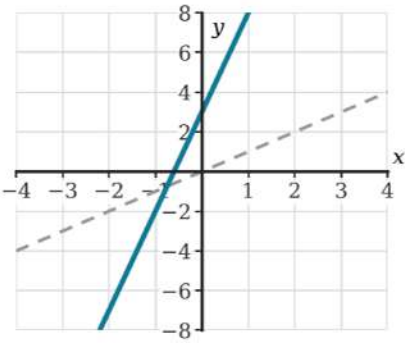
97 Which graph shows $g(x) = 5x$ (solid) and the parent function $f(x) = x$ (dashed)?

A



B



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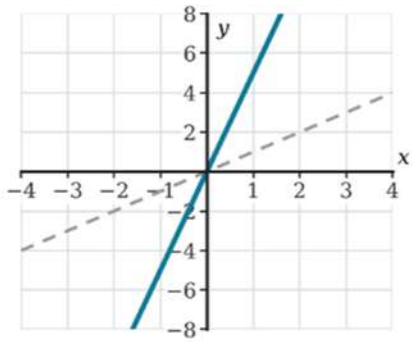

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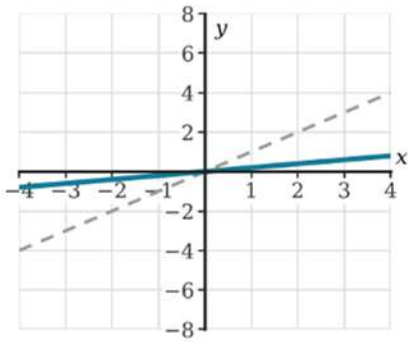

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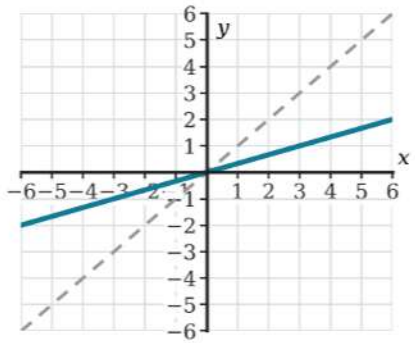
98 Which graph shows $g(x) = \frac{1}{3}x$ (solid) and the parent function $f(x) = x$ (dashed)?

A



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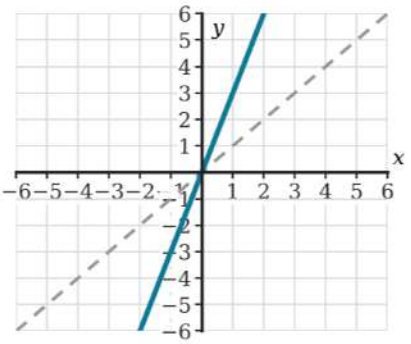

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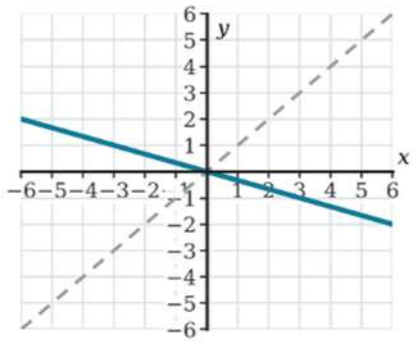
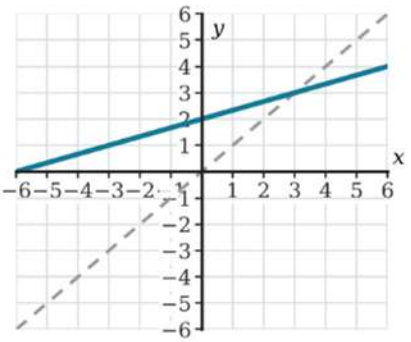


D



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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q14	Write equations of lines in point-slope form given two points	ex2 (4-7)	297 303

99 **Example 2.** Write an equation in point-slope form for the line that passes through $(2, -7)$ and $(6, -3)$, using the first point.

A $y - 7 = x + 2$

B $y + 7 = -(x - 2)$

C $y + 7 = 4(x - 2)$

D $y + 7 = x - 2$

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100
Book #4

4. Write an equation in point-slope form for the line through $(-4, 6)$ and $(-2, 22)$, using the first point.

(A) $y - 6 = 8(x + 4)$

(B) $y - 6 = -8(x + 4)$

(C) $y - 6 = \frac{1}{8}(x + 4)$

(D) $y + 6 = 8(x - 4)$

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Book #5

5. Write an equation in point-slope form for the line through $(1, -3)$ and $(4, -15)$, using the first point.

(A) $y + 3 = -4(x - 1)$

(B) $y + 3 = -\frac{1}{4}(x - 1)$

(C) $y - 3 = -4(x + 1)$

(D) $y + 3 = 4(x - 1)$

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Book #6

6. Write an equation in point-slope form for the line through $(4, -6)$ and $(6, -4)$, using the first point.

(A) $y + 6 = 2(x - 4)$

(B) $y + 6 = x - 4$

(C) $y - 6 = x + 4$

(D) $y + 6 = -(x - 4)$

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103 Book #7

7. Write an equation in point-slope form for the line through $(3, 3)$ and $(6, 7)$, using the first point.

(A) $y - 3 = \frac{4}{3}(x - 3)$

(B) $y - 3 = \frac{3}{4}(x - 3)$

(C) $y - 3 = \frac{4}{3}(x + 3)$

(D) $y - 3 = -\frac{4}{3}(x - 3)$

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q15	Create and identify equations of parallel or perpendicular lines	ex7, ex8, (25-30)	300-302 304

For 25-30: write an equation in slope-intercept form for the line that passes through the given point and is parallel to the graph of the equation, then one that is perpendicular to it.

104

Example 7. Which equation in slope-intercept form is for the line that passes through $(-4, 2)$ and is parallel to the graph of $y = 3x - 5$?

(A) $y = 3x - 10$

(B) $y = 3x + 2$

(C) $y = 3x + 14$

(D) $y = -\frac{1}{3}x + \frac{2}{3}$

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105 **Example 8.** Which equation is for the line that passes through $(1, -2)$ and is perpendicular to the graph of $3x + 2y = 12$?

(A) $y = \frac{2}{3}x - 2$

(B) $y = \frac{3}{2}x - \frac{7}{2}$

(C) $y = \frac{2}{3}x - \frac{8}{3}$

(D) $y = -\frac{3}{2}x - \frac{1}{2}$

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106 Book #25 **25.** The point is $(3, -2)$ and the line is $y = x + 4$. Which pair gives the line through the point parallel to it and the line perpendicular to it?

(A) Parallel: $y = x + 5$; Perpendicular: $y = -x + 1$

(B) Parallel: $y = x - 5$; Perpendicular: $y = -x + 1$

(C) Parallel: $y = -x + 1$; Perpendicular: $y = x - 5$

(D) Parallel: $y = x - 5$; Perpendicular: $y = -x - 5$

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107 Book #26

26. The point is $(4, -3)$ and the line is $y = 3x - 5$. Which pair gives the line through the point parallel to it and the line perpendicular to it?

(A) Parallel: $y = 3x - 15$; Perpendicular: $y = -\frac{1}{3}x + \frac{13}{3}$

(B) Parallel: $y = -\frac{1}{3}x - \frac{5}{3}$; Perpendicular: $y = 3x - 15$

(C) Parallel: $y = 3x - 15$; Perpendicular: $y = -\frac{1}{3}x - \frac{5}{3}$

(D) Parallel: $y = 3x + 9$; Perpendicular: $y = -\frac{1}{3}x - \frac{5}{3}$

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108 Book #27

27. The point is $(0, 2)$ and the line is $y = -5x + 8$. Which pair gives the line through the point parallel to it and the line perpendicular to it?

(A) Parallel: $y = -5x + 2$; Perpendicular: $y = \frac{1}{5}x + 2$

(B) Parallel: $y = -5x + 2$; Perpendicular: $y = 5x + 2$

(C) Parallel: $y = \frac{1}{5}x + 2$; Perpendicular: $y = -5x + 2$

(D) Parallel: $y = -5x + 8$; Perpendicular: $y = \frac{1}{5}x + 2$

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109 Book #28

28. The point is $(-4, 2)$ and the line is $y = -\frac{1}{2}x + 6$. Which pair gives the line through the point parallel to it and the line perpendicular to it?

(A) Parallel: $y = -\frac{1}{2}x$; Perpendicular: $y = 2x + 10$

(B) Parallel: $y = -\frac{1}{2}x + 4$; Perpendicular: $y = 2x + 10$

(C) Parallel: $y = 2x + 10$; Perpendicular: $y = -\frac{1}{2}x$

(D) Parallel: $y = -\frac{1}{2}x$; Perpendicular: $y = 2x - 6$

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110 Book #29

29. The point is $(-2, 3)$ and the line is $y = -\frac{3}{4}x + 4$. Which pair gives the line through the point parallel to it and the line perpendicular to it?

(A) Parallel: $y = -\frac{3}{4}x + \frac{3}{2}$; Perpendicular: $y = \frac{4}{3}x + \frac{1}{3}$

(B) Parallel: $y = -\frac{3}{4}x + \frac{3}{2}$; Perpendicular: $y = \frac{4}{3}x + \frac{17}{3}$

(C) Parallel: $y = \frac{4}{3}x + \frac{17}{3}$; Perpendicular: $y = -\frac{3}{4}x + \frac{3}{2}$

(D) Parallel: $y = -\frac{3}{4}x + \frac{9}{2}$; Perpendicular: $y = \frac{4}{3}x + \frac{17}{3}$

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111

Book #30

30. The point is $(9, 12)$ and the line is $y = 13x - 4$. Which pair gives the line through the point parallel to it and the line perpendicular to it?

(A) Parallel: $y = -\frac{1}{13}x + \frac{165}{13}$; Perpendicular: $y = 13x - 105$

(B) Parallel: $y = 13x + 21$; Perpendicular: $y = -\frac{1}{13}x + \frac{165}{13}$

(C) Parallel: $y = 13x - 105$; Perpendicular: $y = -\frac{1}{13}x + 12$

(D) Parallel: $y = 13x - 105$; Perpendicular: $y = -\frac{1}{13}x + \frac{165}{13}$

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q16	Construct the inverses of relations	(4-9)	331

Find the inverse of each relation.

112

Book #4

4. Find the inverse of the relation $\{(-3, 2),\ (-1, 8),\ (1, 14),\ (3, 20)\}$.

(A) $\{(-2, 3),\ (-8, 1),\ (-14, -1),\ (-20, -3)\}$

(B) $\{(2, -3),\ (8, -1),\ (14, 1),\ (20, 3)\}$

(C) $\{(2, -3),\ (-1, 8),\ (14, 1),\ (3, 20)\}$

(D) $\{(-2, -3),\ (-8, -1),\ (-14, 1),\ (-20, 3)\}$

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113 Book #5

5. Find the inverse of the relation $\{(5,-3),\ (2,-9),\ (-1,-15),\ (-4,-21)\}$.

(A) $\{(3,5),\ (9,2),\ (15,-1),\ (21,-4)\}$

(B) $\{(-3,5),\ (-9,2),\ (-15,-1),\ (-21,-4)\}$

(C) $\{(-3,5),\ (2,-9),\ (-15,-1),\ (-4,-21)\}$

(D) $\{(3,-5),\ (9,-2),\ (15,1),\ (21,4)\}$

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114 Book #6

6. Find the inverse of the relation $\{(4,6),\ (3,1),\ (2,-4),\ (1,-9)\}$.

(A) $\{(-6,4),\ (-1,3),\ (4,2),\ (9,1)\}$

(B) $\{(6,4),\ (3,1),\ (-4,2),\ (1,-9)\}$

(C) $\{(6,4),\ (1,3),\ (-4,2),\ (-9,1)\}$

(D) $\{(-6,-4),\ (-1,-3),\ (4,-2),\ (9,-1)\}$

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115 Book #7

7. Find the inverse of the relation $\{(-1, 16),\ (-2, 12),\ (-3, 8),\ (-4, 4)\}$.

(A) $\{(-16, -1),\ (-12, -2),\ (-8, -3),\ (-4, -4)\}$

(B) $\{(16, -1),\ (12, -2),\ (8, -3),\ (4, -4)\}$

(C) $\{(16, -1),\ (-2, 12),\ (8, -3),\ (-4, 4)\}$

(D) $\{(-16, 1),\ (-12, 2),\ (-8, 3),\ (-4, 4)\}$

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116 Book #8

8. Find the inverse of the relation $\{(-5, 13),\ (6, 10.8),\ (3, 11.4),\ (-10, 14)\}$.

(A) $\{(-13, 5),\ (-10.8, -6),\ (-11.4, -3),\ (-14, 10)\}$

(B) $\{(13, -5),\ (6, 10.8),\ (11.4, 3),\ (-10, 14)\}$

(C) $\{(-13, -5),\ (-10.8, 6),\ (-11.4, 3),\ (-14, -10)\}$

(D) $\{(13, -5),\ (10.8, 6),\ (11.4, 3),\ (14, -10)\}$

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Book #9

9. Find the inverse of the relation $\{(-4,-49),\ (8,35),\ (-1,-28),\ (4,7)\}$.

(A) $\{(49,4),\ (-35,-8),\ (28,1),\ (-7,-4)\}$

(B) $\{(49,-4),\ (-35,8),\ (28,-1),\ (-7,4)\}$

(C) $\{(-49,-4),\ (8,35),\ (-28,-1),\ (4,7)\}$

(D) $\{(-49,-4),\ (35,8),\ (-28,-1),\ (7,4)\}$

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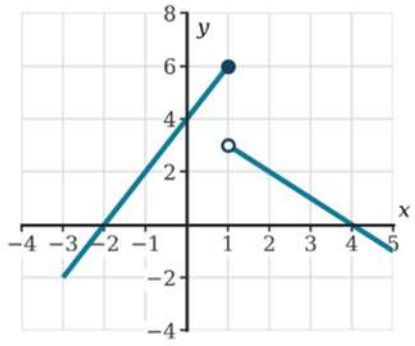
Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q17	Identify and graph piecewise-defined functions	EX1	259

118 Which graph represents $f(x) = \begin{cases} 2x + 4 & \text{if } x \leq 1 \\ -x + 3 & \text{if } x > 1 \end{cases}$?

A



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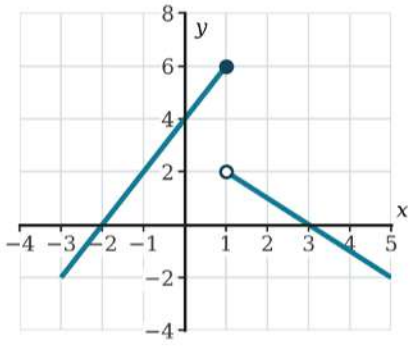

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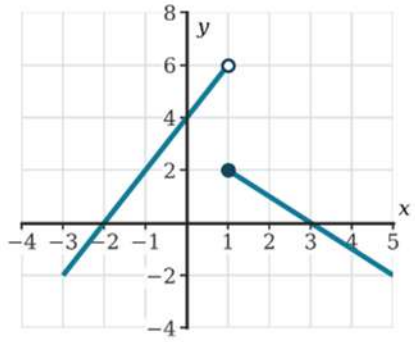

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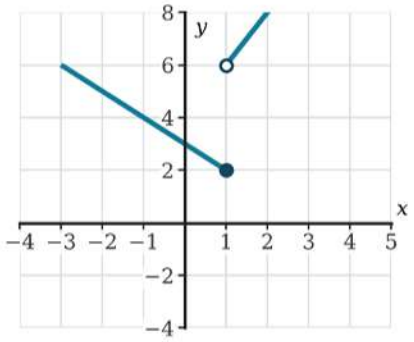

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119 What are the domain and range of $f(x) = \begin{cases} 2x + 4 & \text{if } x \leq 1 \\ -x + 3 & \text{if } x > 1 \end{cases}$?

(A) Domain: $x \leq 1$; Range: all real numbers

(B) Domain: all real numbers; Range: $y \leq 2$

(C) Domain: all real numbers; Range: all real numbers

(D) Domain: all real numbers; Range: $y \leq 6$

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120 For $f(x) = \begin{cases} 2x + 4 & \text{if } x \leq 1 \\ -x + 3 & \text{if } x > 1 \end{cases}$, find $f(1)$ and $f(3)$.

(A) $f(1) = 6$ and $f(3) = 10$

(B) $f(1) = 2$ and $f(3) = 0$

(C) $f(1) = 2$ and $f(3) = 10$

(D) $f(1) = 6$ and $f(3) = 0$

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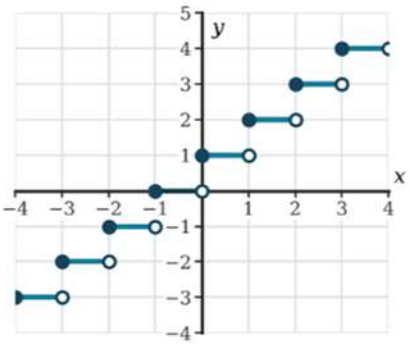
Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q18	Identify and graph step functions	ex2	261

Example 2. Graph a Greatest Integer Function: graph $f(x) = \lfloor x + 1 \rfloor$. State the domain and range.

121 **Example 2.** Which graph represents $f(x) = \lfloor x + 1 \rfloor$ (the greatest integer less than or equal to $x + 1$)?

A



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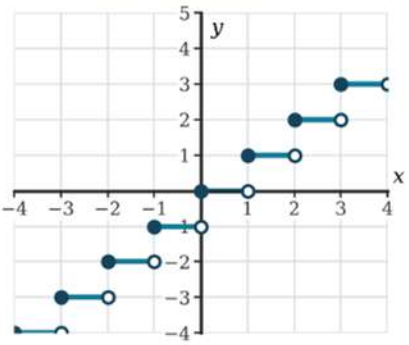

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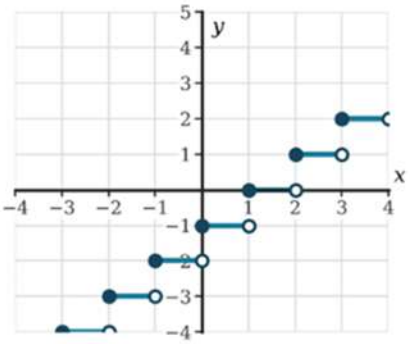

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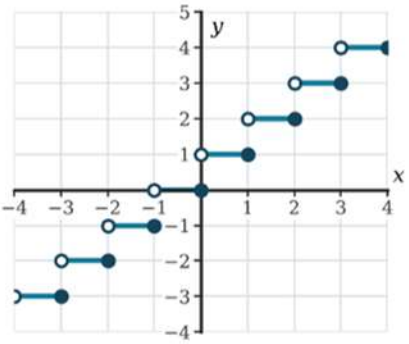

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122 **Example 2.** What are the domain and range of $f(x) = \lfloor x + 1 \rfloor$?

(A) Domain: all integers; Range: all real numbers

(B) Domain: all real numbers; Range: all integers

(C) Domain: all real numbers; Range: all real numbers

(D) Domain: all integers; Range: all integers

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123 **Example 2.** Evaluate $f(x) = \lfloor x + 1 \rfloor$ at $x = 2.5$.

(A) 4 (B) 2 (C) 3 (D) 3.5

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124 **Example 2.** What is the value of $f(x) = \lfloor x + 1 \rfloor$ for every x in $1 \leq x < 2$?

(A) 2 (B) 1 (C) 3 (D) 1.5

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125 **Example 2.** Evaluate $f(x) = \lfloor x + 1 \rfloor$ at $x = -1.5$.

(A) -2 (B) -0.5 (C) -1 (D) 0

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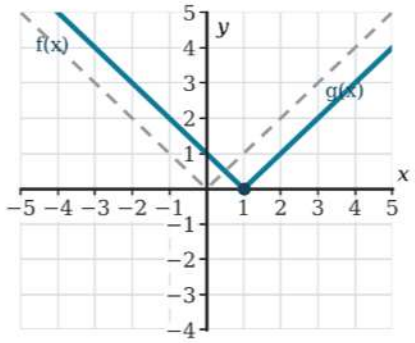
Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q19	Graph absolute value functions	ex4, ex5-(7-12)	269 277

Use the graph of the function to write its equation.

126 Book #4a **Example 4.** The graph shows $f(x) = |x|$ and its transformation *g(x)*. Which equation represents *g(x)*?



(A) $g(x) = |x| + 1$ (B) $g(x) = |x - 1|$ (C) $g(x) = |x| - 1$ (D) $g(x) = |x + 1|$

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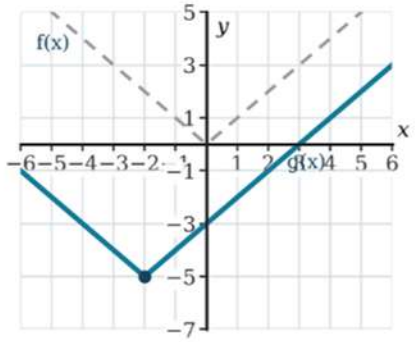
127 Book #4b

Example 4. The graph shows $f(x) = |x|$ and its transformation *g(x)* (vertex at $(-2, -5)$). Which equation represents *g(x)*?



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(A) $g(x) = |x + 2| - 5$

(B) $g(x) = |x + 2| + 5$

(C) $g(x) = |x - 2| + 5$

(D) $g(x) = |x - 2| - 5$

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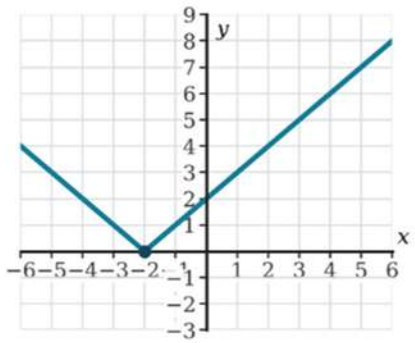
128 Book #7

7. Use the graph (vertex at $(-2, 0)$) to write the equation of the function.



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(A) $f(x) = |x + 2|$

(B) $f(x) = |x| + 2$

(C) $f(x) = |x - 2|$

(D) $f(x) = |x + 2| + 2$

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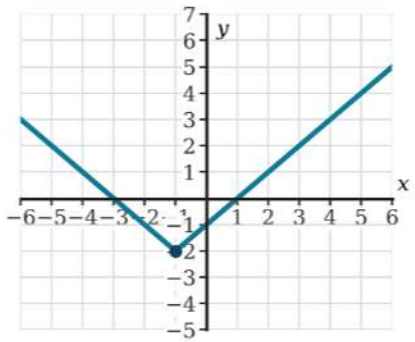
Book #8

8. Use the graph (vertex at $(-1, -2)$) to write the equation of the function.



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(A) $f(x) = |x + 1| + 2$

(B) $f(x) = |x - 2| + 1$

(C) $f(x) = |x + 1| - 2$

(D) $f(x) = |x - 1| - 2$

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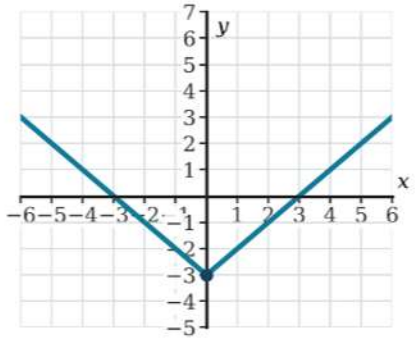
Book #9

9. Use the graph (vertex at $(0, -3)$) to write the equation of the function.



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(A) $f(x) = |x - 3|$

(B) $f(x) = |x + 3|$

(C) $f(x) = |x| - 3$

(D) $f(x) = |x| + 3$

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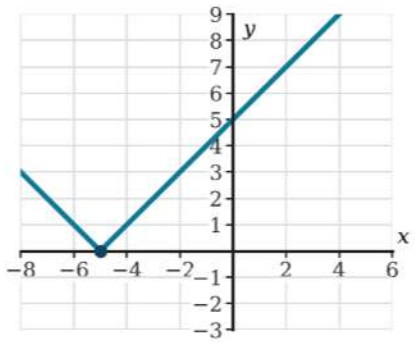
Book #10

10. Use the graph (vertex at $(-5, 0)$) to write the equation of the function.



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A $f(x) = |x| - 5$

B $f(x) = |x + 5|$

C $f(x) = |x - 5|$

D $f(x) = |x| + 5$

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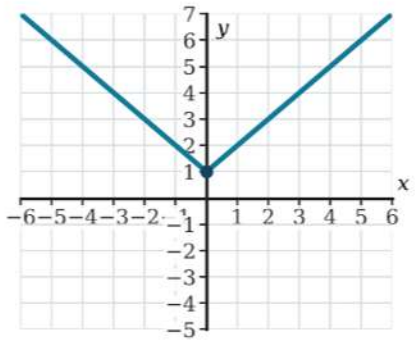
Book #11

11. Use the graph (vertex at $(0, 1)$) to write the equation of the function.



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A $f(x) = |x + 1|$

B $f(x) = |x| - 1$

C $f(x) = |x| + 1$

D $f(x) = |x - 1|$

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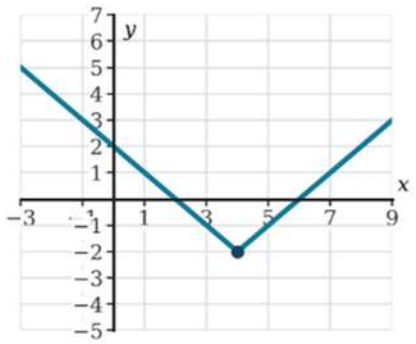
Book #12

12. Use the graph (vertex at $(4, -2)$) to write the equation of the function.



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(A) $f(x) = |x - 2| - 4$

(B) $f(x) = |x + 4| - 2$

(C) $f(x) = |x - 4| + 2$

(D) $f(x) = |x - 4| - 2$

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q20	Write an equation of a line in slope-intercept form given the slope and one point	(33-42)	293

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134

Book #33

33. Determine whether the point $(3, -1)$ is on the line $y = \frac{1}{3}x + 5$. Explain your reasoning.

(A) No: substituting the *x*-value gives a different *y*-value.

(B) No: the point is on the *x*-axis.

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(C) Yes: the point has the same slope as the line.

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(D) Yes: substituting the *x*-value gives the *y*-value of the point.

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Book #34

34. Determine whether the point $(6, -2)$ is on the line $y = \frac{1}{2}x - 5$. Explain your reasoning.

(A) No: the point is on the *y*-axis.

(B) Yes: any point is on a line with this slope.

(C) Yes: substituting the *x*-value gives the *y*-value of the point.

(D) No: substituting the *x*-value gives a different *y*-value.

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Book #35

35. Determine whether the point $(15, -13)$ is on the line $y = -\frac{1}{5}x - 10$. Explain your reasoning.

(A) Yes: substituting the *x*-value gives the *y*-value of the point.

(B) No: substituting the *x*-value gives a different *y*-value.

(C) Yes: any point is on a line with this slope.

(D) No: the point is on the *y*-axis.

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137 Book #36

36. Determine whether the point $(3, 3)$ is on the line $y = -\frac{2}{3}x + 1$. Explain your reasoning.

(A) No: substituting the *x*-value gives a different *y*-value.

(B) No: the point is on the *x*-axis.

(C) Yes: the point has the same slope as the line.

(D) Yes: substituting the *x*-value gives the *y*-value of the point.

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138 Book #37

37. A line passes through $(2, -4)$ and $(4, -2)$. Which other point lies on the line?

(A) $(0, -4)$ (B) $(6, 0)$ (C) $(6, -6)$ (D) $(3, -2)$

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139 Book #38

38. A line passes through $(0, 5)$ and $(4, 1)$. Which other point lies on the line?

(A) $(4, 5)$ (B) $(6, 1)$ (C) $(8, 3)$ (D) $(8, -3)$

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140 Book #39

39. A line passes through $(-3, 1)$ and $(-1, -3)$. Which other point lies on the line?

(A) $(-1, 3)$ (B) $(1, -7)$ (C) $(1, -5)$ (D) $(1, -1)$

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141 Book #40

40. A line passes through $(0, 4)$ and $(2, 5)$. Which other point lies on the line?

(A) $(4, 4)$ (B) $(3, 6)$ (C) $(4, 6)$ (D) $(4, 8)$

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142 Book #41

41. A line passes through $(-2, 9)$ and $(2, -1)$. Which other point lies on the line?

(A) $(0, 4)$ (B) $(0, -4)$ (C) $(4, -6)$ (D) $(0, 5)$

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143 Book #42

42. A line passes through $(3, 0)$ and $(12, 3)$. Which other point lies on the line?

(A) $(6, 3)$ (B) $(9, 0)$ (C) $(15, 4)$ (D) $(6, 1)$

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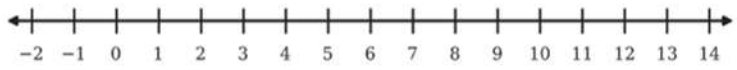
Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q21	Solve and graph linear inequalities containing the word *and* . Solve equations by applying the Distributive Property	1,2,5,6,7,10,11,12 (7-16)	363 97

1 Book #1

Solve each compound inequality. Then graph the solution set.

1. $f - 6 < 5$ and $f - 4 \geq 2$



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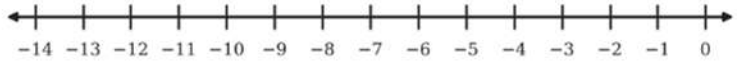
2 Book #2

2. $n + 2 \leq -5$ and $n + 6 \geq -6$



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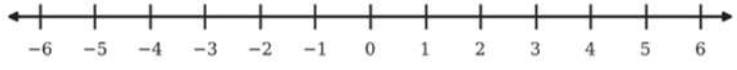
3 Book #5

5. $-5 < 3p + 7 \leq 22$



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4 Book #6

6. $-3 \leq 7c + 4 < 18$

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5 Book #7

7. $5h - 4 \geq 6$ and $7h + 11 < 32$

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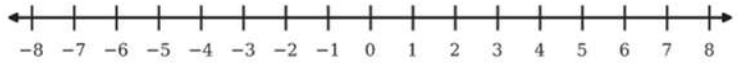
6 Book #10

10. $-4a + 13 \geq 29$ and $10 < 6a - 14$



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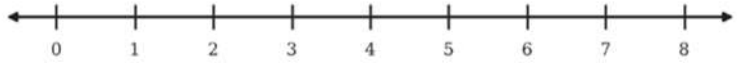
7 Book #11

11. $3b + 2 < 5b - 6 \leq 2b + 9$



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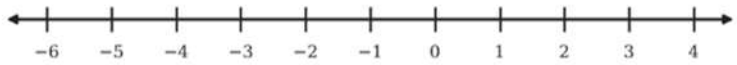
8 Book #12

12. $-2a + 3 \geq 6a - 1 > 3a - 10$



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9 Book #D7

Solve each equation. Check your solution.

7. $2(r + 6) = 4(r + 4)$

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10 Book #D8

8. $6(n + 5) = 3(n + 16)$

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11 Book #D9

9. $5(g+8)-7=117-g$

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12 Book #D10

10. $12-\frac{4}{5}(x+15)=\left(\frac{2}{5}x+6\right)$

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13 Book #D11

11. $3(3m-2)=2(3m+3)$

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14 Book #D12

12. $6(3a+1)-30=3(2a-4)$

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Book #D13

13. $7n + 6 = 4n - 9$

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Book #D14

14. $-6(2r + 8) = -10(r - 3)$

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Book #D15

15. $5 - 3(w + 4) = w - 7$

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Book #D16

16. $2x - 5(x - 3) = 2(x - 10)$

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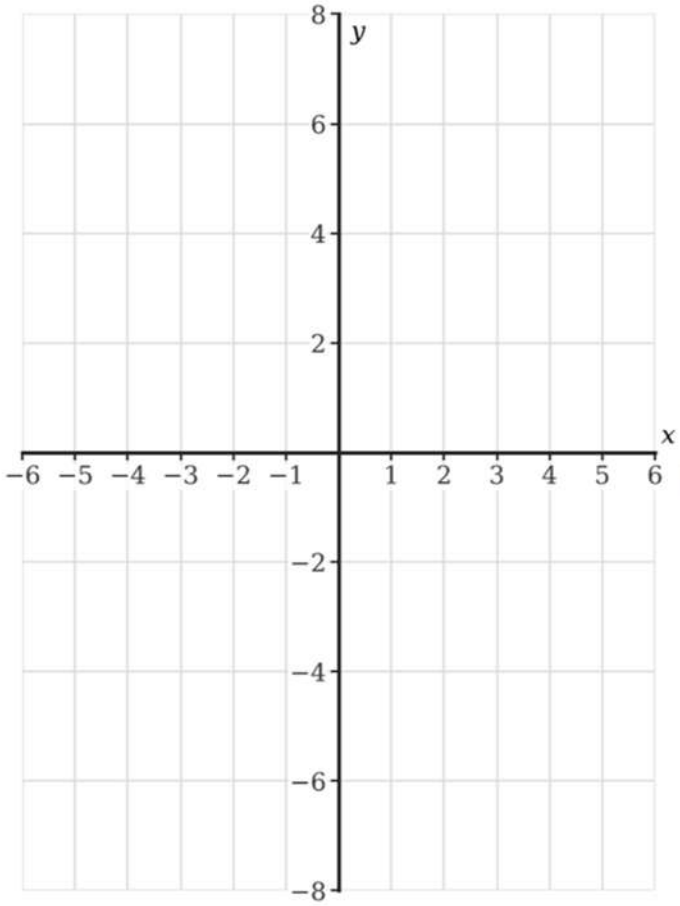
Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q22	Graph linear functions by using the *x*- and *y*-intercepts	(9-14)	216

Graph each equation by using the *x*- and *y*-intercepts.

19

Book #9

9. $y = 4 + 2x$



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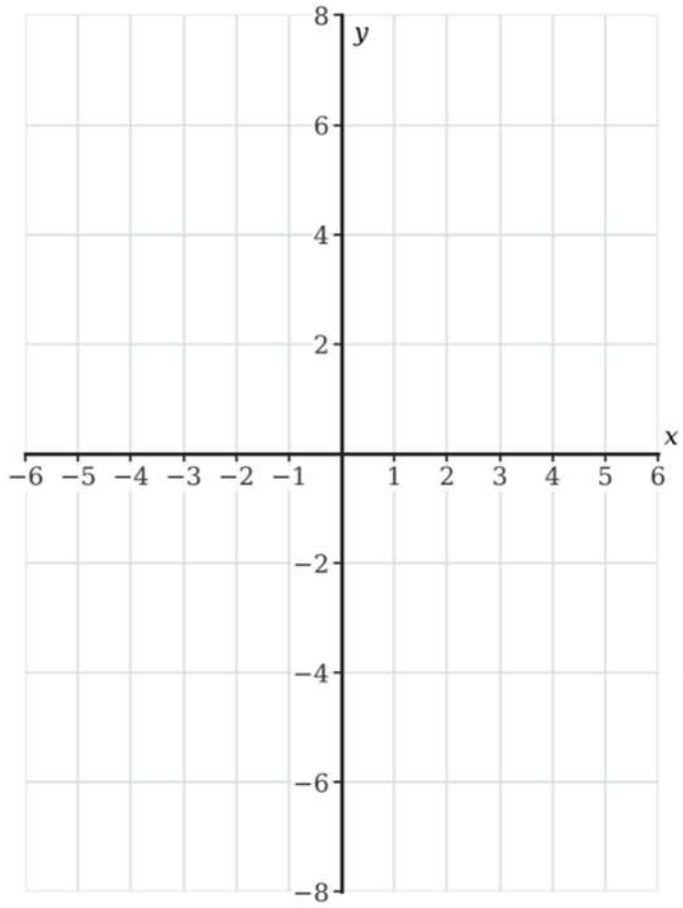
Book #10

10. $5 - y = -3x$



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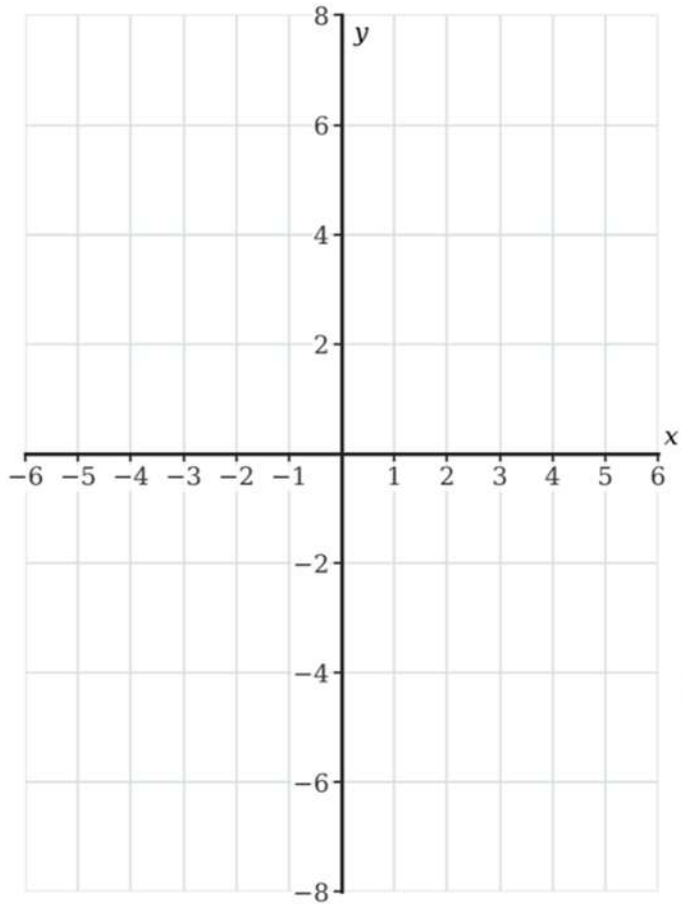
Book #11

11. $x = 5y + 5$



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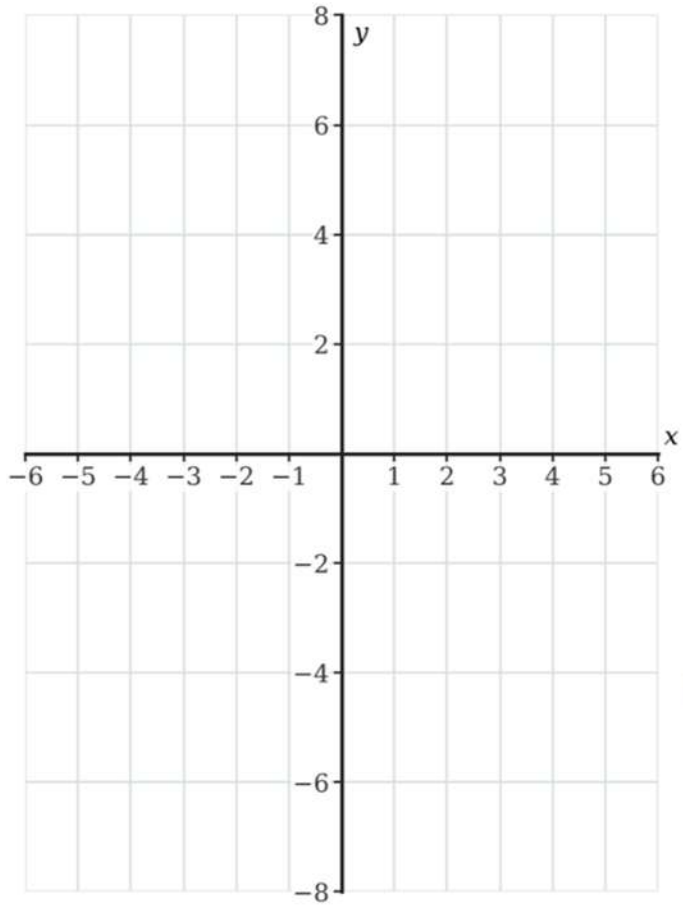
Book #12

12. $x + y = 4$



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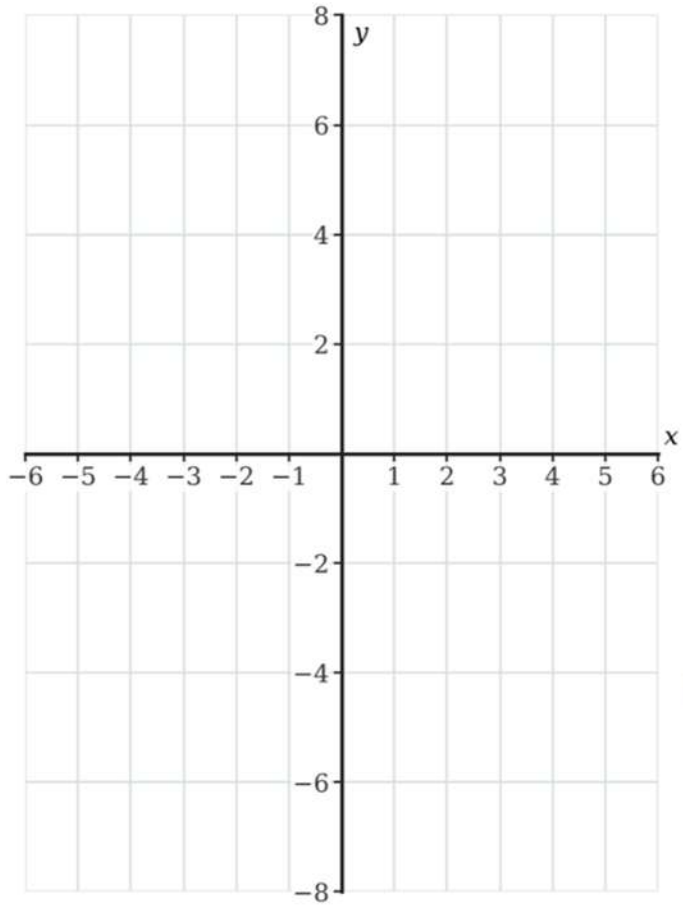
Book #13

13. $x - y = -3$



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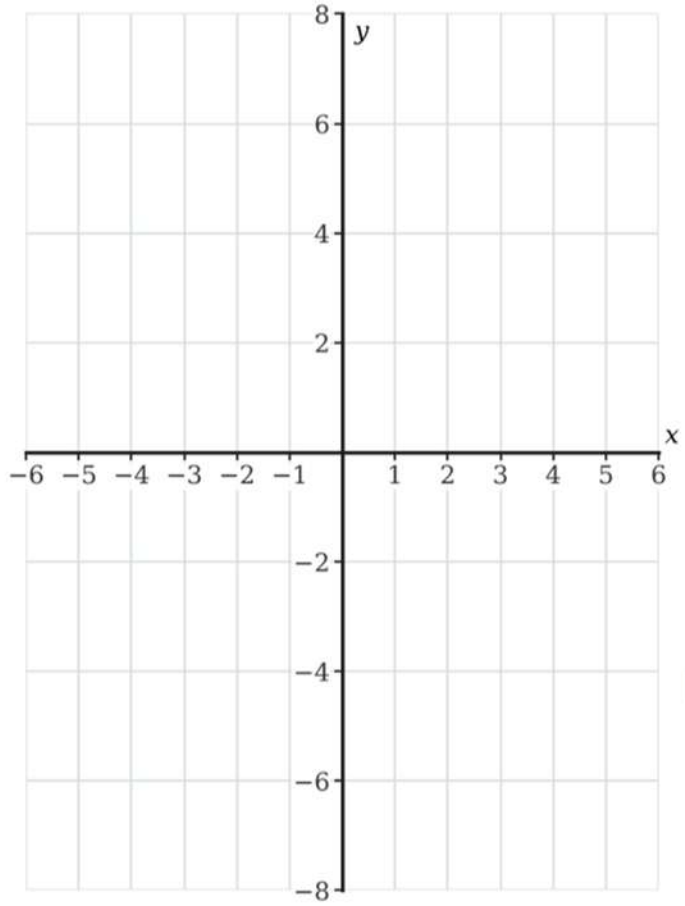
Book #14

14. $y = 8 - 6x$



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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q23	Create and identify equations of parallel or perpendicular lines	ex8-ex9, (29-36), (50-52)	301,302 306

25

Example 8. Write an equation in slope-intercept form for the line that passes through $(1, -2)$ and is perpendicular to the graph of $3x + 2y = 12$.

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Example 9. Determine whether $\overleftrightarrow{AB}$ and $\overleftrightarrow{EF}$ are *parallel*, *perpendicular*, or *neither* for $A(6,8),\ B(2,5),\ E(-6,-3),\ F(0,5)$.

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Book #29

Write an equation in slope-intercept form for the line that passes through the given point and is parallel to the graph of the equation. Then write an equation for the line that passes through the given point and is perpendicular to the graph of the equation.

29. $(-2,3);\ y=-\frac{3}{4}x+4$

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Book #30

30. $(9,12);\ y=13x-4$

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29 Book #31

Determine whether the graphs of each pair of equations are *parallel*, *perpendicular*, or *neither*.

31. $y = 4x + 3$ and $4x + y = 3$

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30 Book #32

32. $y = -2x$ and $2x + y = 3$

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31 Book #33

33. $3x + 5y = 10$ and $5x - 3y = -6$

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32 Book #34

34. $-3x + 4y = 8$ and $-4x + 3y = -6$

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Book #35

35. $2x + 5y = 15$ and $3x + 5y = 15$

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Book #36

36. $2x + 7y = -35$ and $4x + 14y = -42$

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Book #50

ANALYZE 50. Levy claims that the line through $(-6, -2)$ and $(2, 10)$ is perpendicular to the graph of $3x - 2y = 10$. Do you agree? Justify your argument.

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Book #51

ANALYZE 51. Jeremiah says the line through $(7, -10)$ and $(3, -2)$ is parallel to $2x - y = -5$. Do you agree? Justify your argument.

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Book #52

FIND THE ERROR 52. Alonae says that the line through $(1, -4)$ and $(5, -6)$ is parallel to the line through $(2, -7)$ and $(5, -6)$. How can you tell she is mistaken without determining the slope? Explain your reasoning.

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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q24	Apply the arithmetic sequence formula	(23-26)	256

For each problem: (a) create a function to represent the arithmetic sequence, (b) graph the function, (c) answer the question.

38

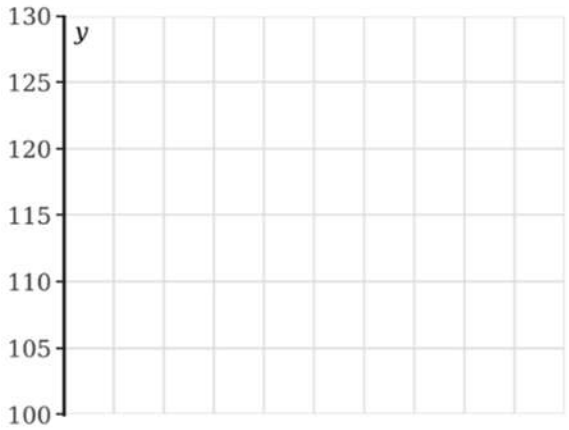
Book #23

23. SPORTS Wanda is the manager for the soccer team. One of her duties is to hand out cups of water at practice. Each cup of water is 4 ounces. She begins practice with a 128-ounce cooler of water.

a. Create a function to represent the arithmetic sequence (the ounces of water remaining after *n* cups).

b. Graph the function.

c. How much water is remaining after Wanda hands out the 14th cup?



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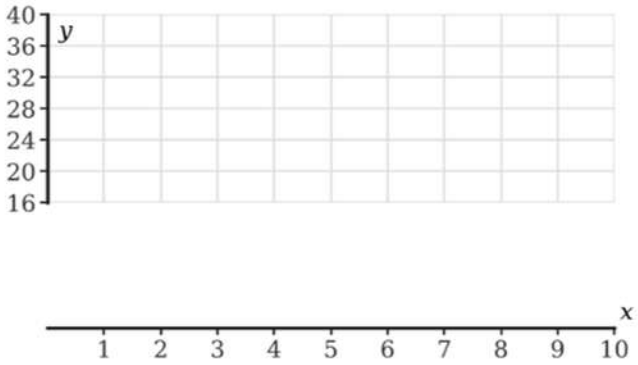
Book #24

24. THEATER A theater has 20 seats in the first row, 22 in the second row, 24 in the third row, and so on for 25 rows.

a. Create a function to represent the arithmetic sequence.

b. Graph the function.

c. How many seats are in the last row?



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40

Book #25

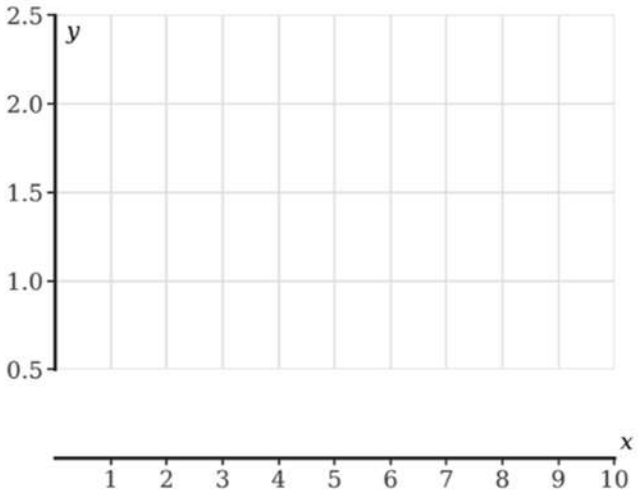
25. POSTAGE The price to send a large envelope first class mail is 88 cents for the first ounce and 17 cents for each additional ounce. The table shows the cost for weights up to 5 ounces.

Weight (ounces)	1	2	3	4	5
Postage (dollars)	0.88	1.05	1.22	1.39	1.56

a. Create a function to represent the arithmetic sequence.

b. Graph the function.

c. How much did a large envelope weigh that cost $2.07 to send?



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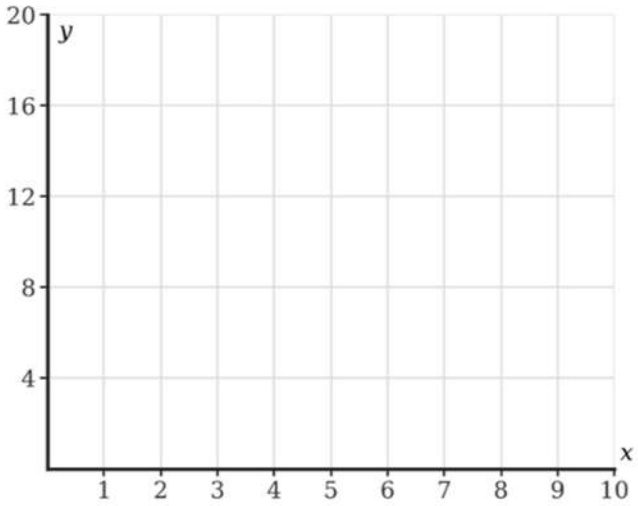
Book #26

26. VIDEO DOWNLOADING Brian is downloading episodes of his favorite TV show to play on his personal media device. The cost to download 1 episode is $1.99. The cost to download 2 episodes is $3.98. The cost to download 3 episodes is $5.97.

a. Create a function to represent the arithmetic sequence.

b. Graph the function.

c. What is the cost to download 9 episodes?



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Q	LEARNING OUTCOME	REVEAL (ENGLISH)	PAGE
Q25	Solve equations for specific variables	ex4, (23-24)	120 126

42 **PARTY** The total amount of money Kishi spends on pizza for a party is $T = 13.49c + 15.49p$. T represents the total amount of money she spends, c represents the number of cheese pizzas she buys, and p represents the number of pepperoni pizzas she buys.

a. Solve the formula for c.

b. Solve the formula for p.

c. If Kishi spends $100 and buys 2 pepperoni pizzas, how many cheese pizzas can she buy? (Round down to a whole number.)

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Book #23

COFFEE SHOP 23. Consuelo is buying flavored coffee and plain coffee. The total amount of money she spends on coffee is $T = 5.50p + 7f$, where p represents the cost of a package of plain coffee and f represents the cost of a package of flavored coffee.

a. If Consuelo has $40 to spend on coffee, describe the constraints on the formula.

b. Solve for f.

c. If Consuelo needs to buy 3 packages of plain coffee, what is the maximum number of packages of flavored coffee she can buy?

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Book #24

SHOPPING 24. Kimberly is ordering bath towels and washcloths for the inn where she works. The total cost of the order is $T = 6b + 2w$, where T is the total cost, b is the number of bath towels, and w is the number of washcloths.

a. Her budget is $85. Describe the constraints.

b. Solve for b.

c. She needs to order at least 20 washcloths. How many bath towels can she order and stay under budget?

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