

أسئلة الهيكل في الرياضيات



تم تحميل هذا الملف من موقع المناهج الإماراتية

موقع المناهج ← المناهج الإماراتية ← الصف التاسع العام ← رياضيات ← الفصل الثالث ← ملفات متنوعة ← الملف

تاريخ إضافة الملف على موقع المناهج: 2026-05-26 14:14:36

ملفات اكتب للمعلم اكتب للطالب | اختبارات الكترونية | اختبارات | حلول | عروض بوربوينت | أوراق عمل
منهج انجليزي | ملخصات وتقارير | مذكرات وبنوك | الامتحان النهائي | للمدرس

المزيد من مادة
رياضيات:

إعداد: مصطفى عبد العزيز

التواصل الاجتماعي حسب الصف التاسع العام



صفحة المناهج
الإماراتية على
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

المزيد من الملفات بحسب الصف التاسع العام والمادة رياضيات في الفصل الثالث

Reveal Coverage Grade 9 GEN Solution

1

Reveal Coverage Grade 9 GEN

2

ملزمة للهيكل الوزاري

3

EOT FOR FINAL EXAM GRADE 9 GENERAL REVEAL

4

هيكل اختبار نهاية الفصل 2026م غير محلول

5



مدرسة الحصن

أسئلة الهيكل

في

الرياضيات
الفصل الثالث

2026-2025

تاسع عام (ريفيل)

كلنا ناجحون بإذن الله

1	Solve systems of equations by using the substitution method	(EX1,1-2)	P399-403
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Example (1)

Use substitution to solve the system of equations.

$$3x - y = -7$$

$$y = 4x + 11$$

Use substitution to solve the system of equations.

$$y = 5x + 1$$

$$4x + y = 10$$

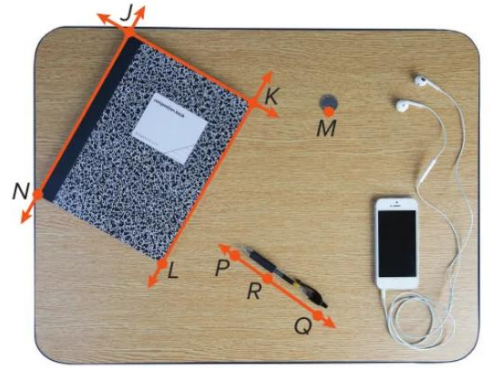
$$y = 4x + 5$$

$$2x + y = 17$$

Example 2

Name the geometric terms modeled by the objects in the picture.

- The notebook models plane JKL
- The edges of the notebook model line $\overleftrightarrow{JK}$ and line $\overleftrightarrow{KL}$
- The quarter models point M in space.
- Points N, L, K are coplanar.
- Points P, Q, R are collinear.



Name the geometric terms modeled by each object or phrase.

8. roof of a house



9. a tabletop



10. bridge support beam



11. a chessboard



12.



14. a wall and the floor.

15. the edge of a table

16. two connected walls

17. a blanket

18. a telephone pole .

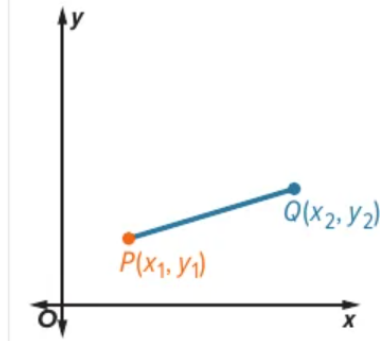
19. a tablet computer

3	Find the distance between two points on the coordinate plane	concept	579
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Key Concept • Distance Formula on the Coordinate Plane

If P has coordinates (x_1, y_1) and Q has coordinates (x_2, y_2) , then

$$PQ = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}.$$

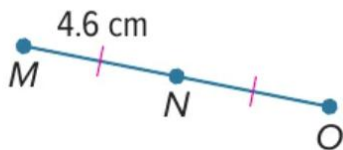


Find the distance between J (4, 3) and K (-3, -7).

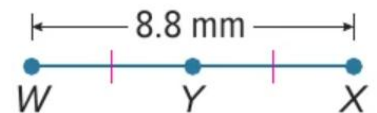
4	Apply the definition of congruent line segments to find missing values	EX5 (28-33)	P574
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Find the measure of each segment.

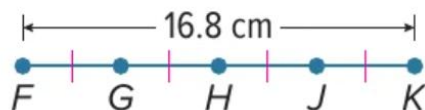
28. $\overline{MO}$



29. $\overline{WY}$



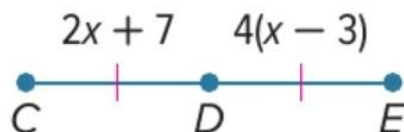
30. $\overline{FG}$



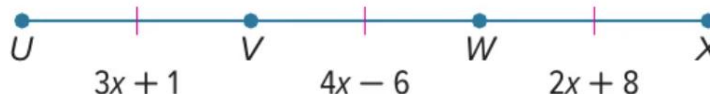
31. $\overline{QT}$



32. $\overline{DE}$



33. $\overline{UX}$



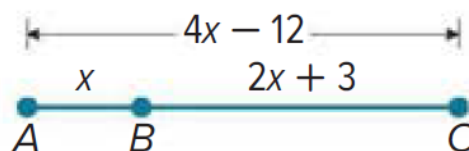
5 Apply the definition of congruent line segments to find missing values

EX3(34-37)

570,575

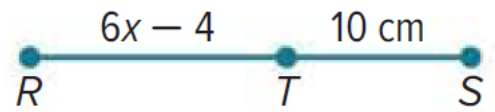
Ex: 3

Find the value of x and BC if B is between A and C , $AC = 4x - 12$, $AB = x$, and $BC = 2x + 3$.



34. Find the length of $\overline{UW}$ if W is between U and V , $UV = 16.8$ centimeters, and $VW = 7.9$ centimeters.

35. Find the value of x if $RS = 24$ centimeters.



36. Find the length of $\overline{LO}$ if M is between L and O , $LM = 7x - 9$, $MO = 14$ inches, and $LO = 10x - 7$.

37. Find the value of x if $\overline{PQ} \cong \overline{RS}$, $PQ = 9x - 7$, and $RS = 29$.

6	Solve systems of equations by using the substitution method	(1,2,9,10,11)	403
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Use substitution to solve each system of equations.

$$y = 5x + 12$$

$$4x + y = 10$$

$$y = 4x + 5$$
$$2x + y = 17$$

$$x = y - 1$$
$$-x + y = -1$$

$$y = -4x + 11$$
$$3x + y = 9$$

$$y = -3x + 1$$
$$2x + y = 1$$

Use elimination to solve each system of equations.

$$-v + w = 7$$

$$v + w = 1$$

$$2. y + z = 4$$

$$y - z = 8$$

$$3. -4x + 5y = 17$$

$$4x + 6y = -6$$

$$4. 5m - 2p = 24$$

$$3m + 2p = 24$$

8	Solve systems of equations by eliminating a variable using subtraction	(5-8)	409
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5. $a + 4b = -4$
 $a + 10b = -16$

6. $6r - 6t = 6$
 $3r - 6t = 15$

7. $6c - 9d = 111$
 $5c - 9d = 103$

8. $11f + 14g = 13$
 $11f + 10g = 25$

9	Solve systems of equations by eliminating a variable using addition	(EX2,28-30)	406,410
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Example 2: Write and Solve a System of Equations Using Addition

Seven times a number minus four times another number is thirteen. Negative seven times a number plus seven times another number is fourteen. Find the numbers.

28. Twice a number added to another number is 15. The sum of the two numbers is 11. Find the numbers.

29. Twice a number added to another number is -8 . The difference of the two numbers is 2. Find the numbers.

30. The difference of two numbers is 2. The sum of the same two numbers is 6. Find the numbers.

10	Solve systems of equations by eliminating a variable using multiplication and addition	(EX1,1-5)	413,417
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Use elimination to solve the system of equations.

$$10x + 5y = 30$$

$$5x - 3y = -7$$

Use elimination to solve each system of equations.

1. $x + y = 2$
 $-3x + 4y = 15$

2. $x - y = -8$
 $7x + 5y = 16$

3. $x + 5y = 17$
 $-4x + 3y = 24$

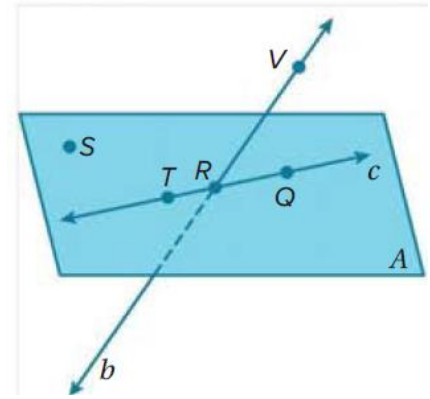
4. $6x + y = -39$
 $3x + 2y = -15$

5. $2x + 5y = 11$
 $4x + 3y = 1$

Example (1)

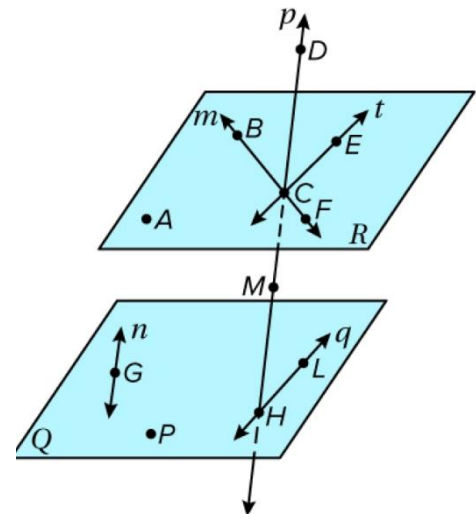
Use the figure to name each of the following.

- a line containing point Q
- a plane containing point S and point T



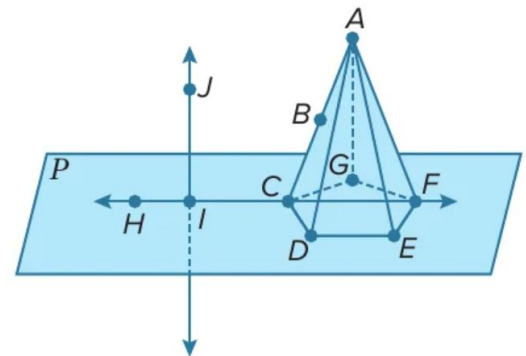
Refer to the figure for Exercises 1–7.

- Name the lines that are only in plane Q.
- How many planes are labeled in the figure?
- Name the plane containing the lines m and t.
- Name the intersection of lines m and t.



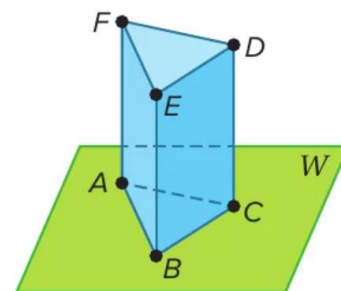
Refer to the figure.

- How many planes appear in this figure?
- Name four points that are collinear.
- Name the intersection of plane GAC and plane P.
- At what point do $\overleftrightarrow{JI}$ and $\overleftrightarrow{DC}$ intersect? Explain.

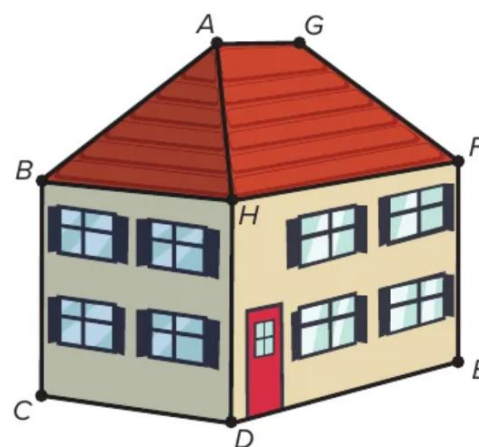


Refer to the figure for Exercises 25–28.

25. How many planes are shown in the figure?
26. How many of the planes contain points F and E?
27. Name four points that are coplanar.
28. Are points A, B, and C coplanar? Explain.

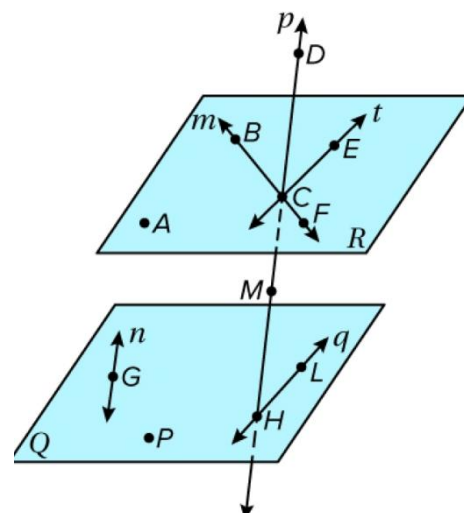


29. **BUILDING** The roof and exterior walls of a house represent intersecting planes. Using the image, name all the lines that are formed by the intersecting planes.

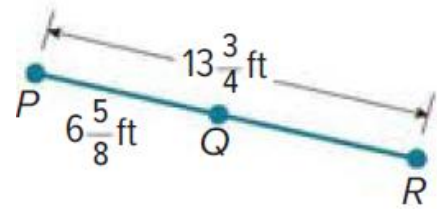


14	Identify intersections of lines and planes	EX4(4-7)	564,565
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4. Name the intersection of lines m and t.
5. Name a point that is not coplanar with points A, B, and C
6. Are points F, M, G, and P coplanar? Explain.
7. Does line n intersect line q? Explain.

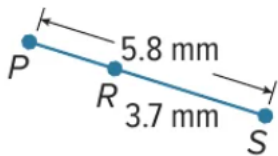


Example 2: Find the measure of $\overline{QR}$.

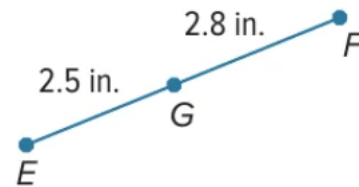


Find the measure of each segment.

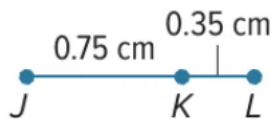
1. $\overline{PR}$



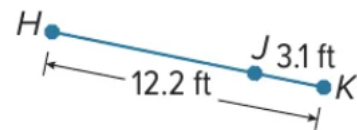
2. $\overline{EF}$



3. $\overline{JL}$



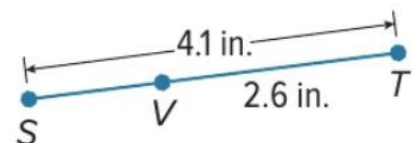
4. $\overline{HJ}$



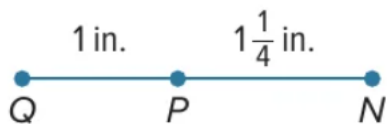
5. $\overline{AC}$



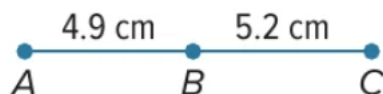
6. $\overline{SV}$



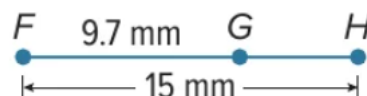
7. $\overline{NQ}$



8. $\overline{AC}$



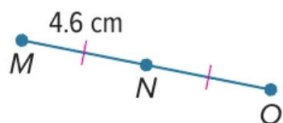
9. $\overline{GH}$



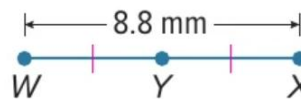
16	Apply the definition of congruent line segments to find missing values	(28-33)	574
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Find the measure of each segment.

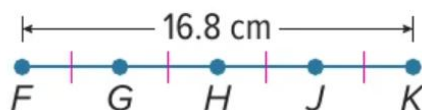
28. $\overline{MO}$



29. $\overline{WY}$



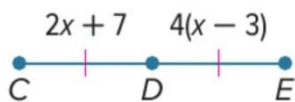
30. $\overline{FG}$



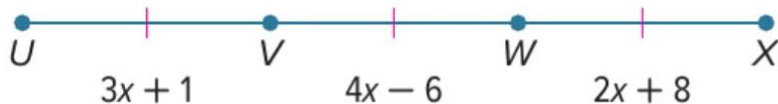
31. $\overline{QT}$



32. $\overline{DE}$



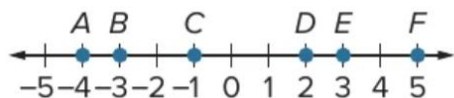
33. $\overline{UX}$



17	Find the length of a line segment on a number line	Ex1(1-9)	577,581
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Example 1

Use the number line.



Find CF .

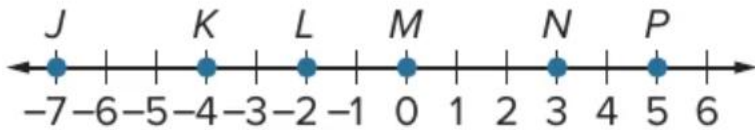
$$\begin{aligned}
 CF &= |x_2 - x_1| \\
 &= |5 - (-1)| \\
 &= 6
 \end{aligned}$$

Distance Formula

$$x_1 = -1 \text{ and } x_2 = 5$$

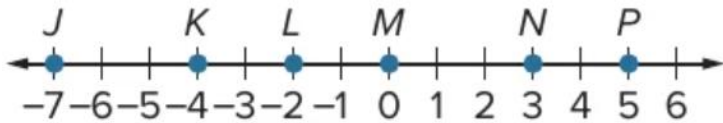
Simplify.

Use the number line to find each measure.



1. $JL =$

2. $JK =$

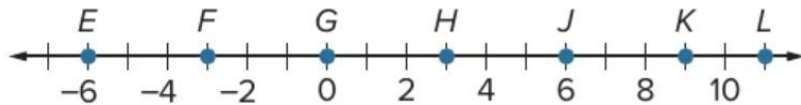


3. $KP =$

4. $NP =$

5. $JP =$

6. $LN =$



7. $JK =$

8. $LK =$

9. $FG =$

18	Find the distance between two points on the coordinate plane	Ex3(31-36)	579,583
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Example 3

Find the distance between J (4, 3) and K (-3, -7).

Find the distance between each pair of points. Round to the nearest tenth, if necessary.

31. M (-4, 9), N (-5, 3)

32. C (2, 4), D (5, 7)

33. A (5, 1), B (3, 6)

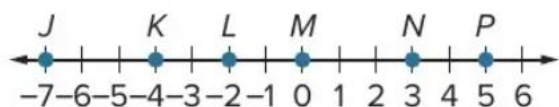
34. V (4, 4), X (5, 8)

35. S(6, 4), T (3, 2)

36. M (-1, 8), N (-3, 3)

19	Find the coordinate of a midpoint on a number line	(1-6)	605
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Use the number line to find the coordinate of the midpoint of each segment.



1. $\overline{KM}$

2. $\overline{JP}$

3. $\overline{LN}$

4. $\overline{MP}$

5. $\overline{LP}$

6. $\overline{JN}$

20	Find the coordinates of the midpoint or endpoint of a line segment on the coordinate plane	(19-24)	606
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Find the coordinates of the midpoint of a segment with the given endpoints.

19. $(5, 11), (3, 1)$

20. $(7, -5), (3, 3)$

21. $(-8, -11), (2, 5)$

22. $(7, 0), (2, 4)$

23. $(-5, 1), (2, 6)$

24. $(-4, -7), (12, -6)$

21	Find the coordinates of the midpoint or endpoint of a line segment on the coordinate plane	(33-38)	606
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Find the coordinates of the missing endpoint if B is the midpoint of $\overline{AC}$.

33. C $(-5, 4)$, B $(-2, 5)$

34. A $(1, 7)$, B $(-3, 1)$

35. A $(-4, 2)$, B $(6, -1)$

36. C $(-6, -2)$, B $(-3, -5)$

37. A $(4, -0.25)$, B $(-4, 6.5)$

38. C $(\frac{5}{3}, -6)$, B $(\frac{8}{3}, 4)$

22	Solve systems of equations by eliminating a variable using multiplication and addition	Ex2(7-12)	414,417
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Use elimination to solve the system of equations.

$$3x + 4y = -22$$

$$-2x + 3y = -8$$

Use elimination to solve each system of equations.

$$3x + 4y = 29$$

$$6x + 5y = 43$$

$$8x + 3y = 4$$

$$-7x + 5y = -34$$

$$8x + 3y = -7$$

$$7x + 2y = -3$$

$$4x + 7y = -80$$

$$3x + 5y = -58$$

$$12x - 3y = -3$$

$$6x + y = 1$$

$$-4x + 2y = 0$$

$$10x + 3y = 8$$

23	Solve systems of equations by eliminating a variable using multiplication and addition	Ex1(1-6)	413, 417
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Use elimination to solve the system of equations.

$$10x + 5y = 30$$

$$5x - 3y = -7$$

Use elimination to solve each system of equations.

$$\begin{aligned}x + y &= 2 \\ -3x + 4y &= 15\end{aligned}$$

$$\begin{aligned}x - y &= -8 \\ 7x + 5y &= 16\end{aligned}$$

$$\begin{aligned}x + 5y &= 17 \\ -4x + 3y &= 24\end{aligned}$$

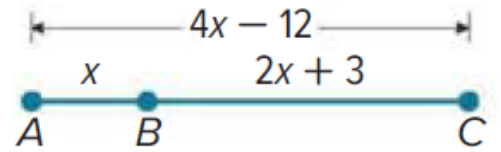
$$\begin{aligned}6x + y &= -39 \\ 3x + 2y &= -15\end{aligned}$$

$$\begin{aligned}2x + 5y &= 11 \\ 4x + 3y &= 1\end{aligned}$$

$$\begin{aligned}3x - 3y &= -6 \\ -5x + 6y &= 12\end{aligned}$$

24	Apply the definition of congruent line segments to find missing values	Ex3(10-14)	570,573
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Find the value of x and BC if B is between A and C , $AC = 4x - 12$, $AB = x$, and $BC = 2x + 3$.



Find the value of the variable and YZ if Y is between X and Z .

10. $XY = 11$, $YZ = 4c$, $XZ = 83$

11. $XY = 6b$, $YZ = 8b$, $XZ = 175$

12. $XY = 7a$, $YZ = 5a$, $XZ = 6a + 24$

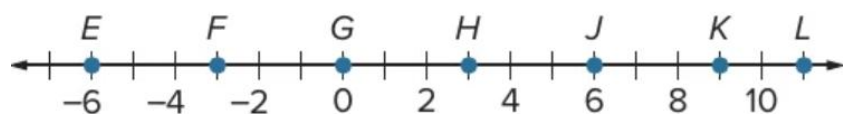
$$13. XY = 5.5, YZ = 2c, XZ = 8.9$$

25 Calculate measures of line segments

(7-12)

581

Use the number line to find each measure.



7. $JK =$

8. $LK =$

9. $FG =$

10. $JG =$

11. $EH =$

12. $LF =$