تمارين وحلول درس الحجم والأشكال المركبة

تم تحميل هذا الملف من موقع المناهج الإماراتية
موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف الخامس ⇦ رياضيات ⇦ الفصل الأول ⇦ ملفات متنوعة ⇦ الملف
تاريخ إضافة الملف على موقع المناهج: 15-11-2026 10:30:47

المزيد من مادة رياضيات:	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

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

المزيد من الملفات بحسب الصف الخامس والمادة رياضيات في الفصل الأول	
1	هيكل اختبار نهاية الفصل
2	هيكل امتحان – أوراق عمل وتدريبات
3	تجميع هيكل اختبار نهاية الفصل
4	إجابة تجميع هيكل اختبار نهاية الفصل الأول
5	هيكل – أسئلة موضوعية للمقارنة والترتيب

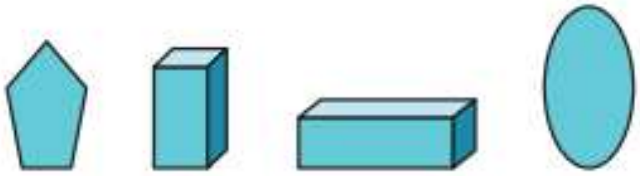
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تطبيق المناهج على App Store (آبل)	تطبيق المناهج على Play Google (أندرويد)

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Name _____

1. Which of these figures have volume? Justify your reasoning.



For the situation, would you measure the *length*, *area*, or *volume*? Explain.

2. the amount of soil needed to fill a flower pot

3. the distance of a bike ride

4. the amount of wall space covered by a poster

5. the amount of concrete needed to fill a patio

6. the space inside a moving truck

7. the distance around a building

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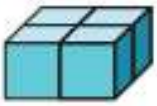
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Name _____

Determine the volume of the figure.

1.



Number of layers: _____

Number in each layer: _____

Volume: _____ cubic units

2.

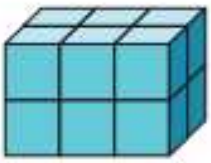


Number of layers: _____

Number in each layer: _____

Volume: _____ cubic units

3.

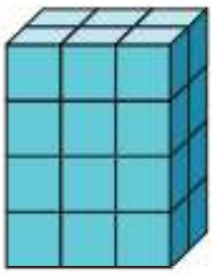


Number of layers: _____

Number in each layer: _____

Volume: _____ cubic units

4.

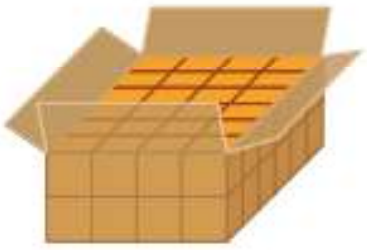


Number of layers: _____

Number in each layer: _____

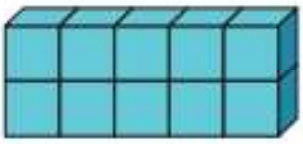
Volume: _____ cubic units

5. How can you determine the volume of the box?



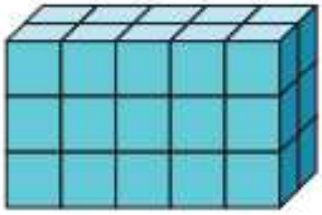
What is the volume of the figure?

6.



_____ cubic units

7.



_____ cubic units

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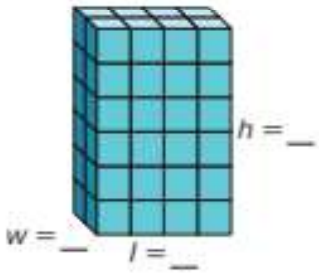
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Name _____

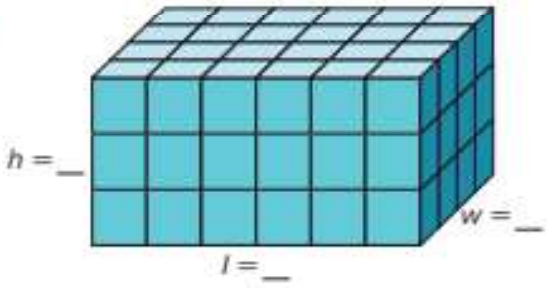
Label the dimensions and then determine the volume of the figure.

1.



$V =$ _____ cubic units

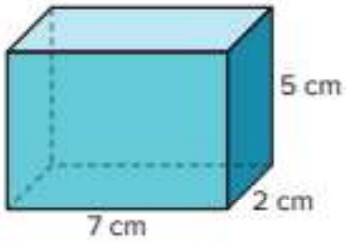
2.



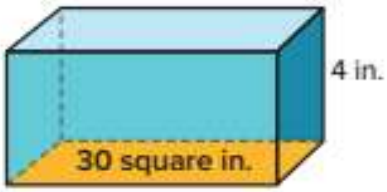
$V =$ _____ cubic units

What is the volume of the figure? Tell which volume formula you used and why.

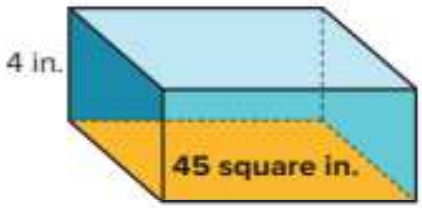
3.



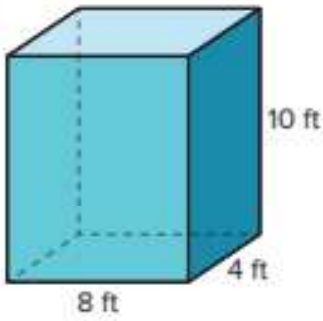
4.



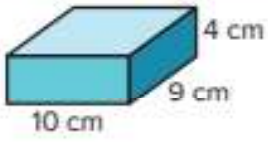
5.



6.



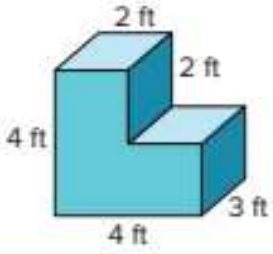
7. Explain how the Associative Property can be used to mentally find the volume of this figure.



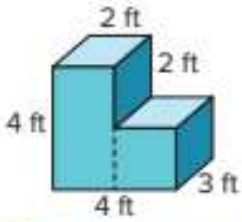
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How can you determine the volume of this figure?



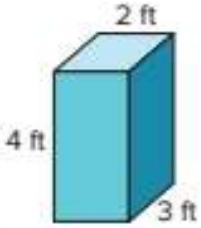
Look for a way to make two rectangular prisms.



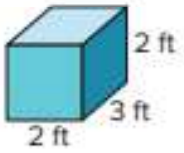
Math is... Connections

Why should the volume be the same whichever way you decompose a composite figure?

Determine the volume of each rectangular prism.



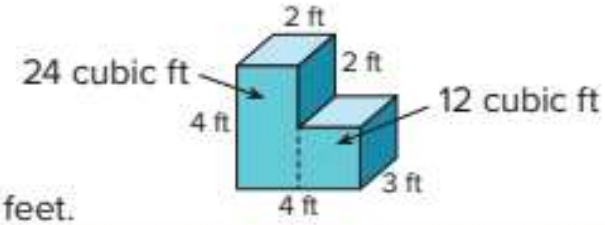
$V = 2 \times 3 \times 4$
$V = 24$ cubic ft



$V = 2 \times 3 \times 2$
$V = 12$ cubic ft

Add the volumes.

$24 + 12 = 36$

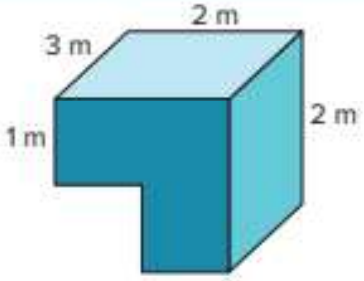


The volume of the figure is 36 cubic feet.

You can determine the volume of the **composite solid figure** by adding the volumes of the rectangular prisms that compose it.

Work Together

Draw lines to show how you could decompose the solid. What is the volume of the figure?



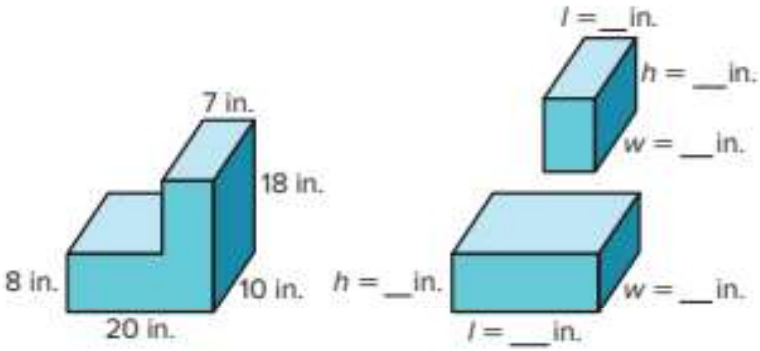
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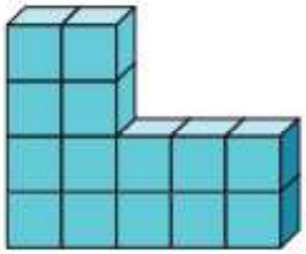
Name _____

1. Label the unknown dimensions of the decomposed figure and then find the volume of the composite solid figure.



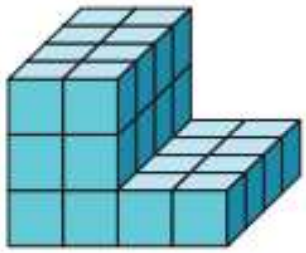
What is the volume of the figure?

2.



$V =$ _____ cubic units

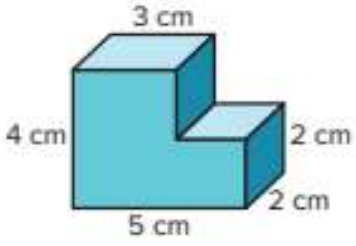
3.



$V =$ _____ cubic units

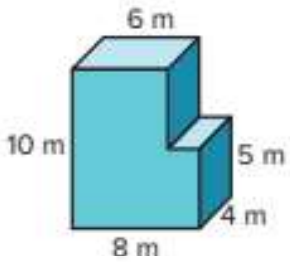
Draw line(s) to show how you decomposed the figure.
What is the volume of the figure?

4.



$V =$ _____

5.



$V =$ _____

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Name _____

Use the place-value chart to complete the sentence.

1. The value of the 6 in the hundreds place is _____ times the value of the 6 in the _____ place.

hundred thousands	ten thousands	thousands	hundreds	tens	ones
	3	2	5	6	5
	7	3	6	1	0

Complete the sentences to describe the relationship between the values of each digit 4 and each digit 9 in the number 447,699.

2. The value of the digit 4 in the ten thousands place is _____ the value of the digit 4 in the _____ place.
3. The value of the digit 9 in the _____ place is 10 times the value of the digit 9 in the _____ place.

Is each statement *true* or *false*?

4. The digit 3 in 5,630, is 10 times the value of the digit 3 in 342.

5. The digit 3 in 5,630, is $\frac{1}{10}$ the value of the digit 3 in 342.

6. The digit 3 in 5,630, is 10 times the value of the 3 in 13.

7. The digit 3 in 5,630, is $\frac{1}{10}$ the value of the digit 3 in 13.

8. On Tuesday, 600 people attended a play at the Children's Theatre. The same play had 6,000 attendees on Saturday.

   When you compare 600 attendees to 6,000 attendees, 600 is

   _____ as much as 6,000.

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Name _____

What is the word form of the decimal?

1. 8.2

2. 8.02

3. 0.82

4. 0.082

What is the standard form of the decimal?

5. $0.9 + 0.03 + 0.007$

6. $20 + 0.7 + 0.08 + 0.006$

7. $5 + 0.01 + 0.009$

8. $7 + \frac{4}{10} + \frac{5}{1{,}000}$

What is each decimal in standard form?
What is each decimal in expanded form?

9. ninety-three and six thousandths

10. three and eight hundred forty-six thousandths

11. two hundred twelve and fifteen thousandths

12. seven hundred fifty-one thousandths

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Which bag weighs more?



3.281 kg 3.095 kg

Compare the digits in each place starting with the greatest place-value position.

ones	tenths	hundredths	thousandths
3	2	8	1
3	0	9	5

Both numbers have 3 ones.

2 tenths > 0 tenths

Math is... Thinking

Why was it not necessary to compare the hundredths place?

3.281 > 3.095. So, the purple bag weighs more than the red bag.

You can compare decimals the same way you compare multi-digit numbers.

Work Together

Compare the weights of these bags.

ones	tenths	hundredths	thousandths
3	2	8	1
3	9		

3.281 ◯ 3.9



3.281 kg 3.9 kg

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Name _____

Write >, <, or = in each ◯ to make a true comparison. You can use a place-value chart to help.

1. 7.790 ◯ 8.7
2. 1.021 ◯ 1.095
3. 6.55 ◯ 5.66
4. 9.9 ◯ 0.99
5. 3.41 ◯ 3.41
6. 2.563 ◯ 2.573

For exercises 7–9, use the cost of each school supply.



7. Do the pencils or the highlighters cost more?

8. Write a comparison statement for the cost of the pens and the pencils.

9. Which school supply is the most expensive? Which school supply is the least expensive? Explain how you know.

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Name _____

What is each decimal rounded to the nearest whole number? You can use a number line or place value.

1. 78.39

2. 4.07

3. 12.7

4. 15.55

What is each decimal rounded to the nearest tenth? You can use a number line or place value.

5. 42.89

6. 3.65

7. 16.12

8. 98.17

9. Danica rounded a number to the nearest tenth to get 14.7. What number could she have rounded to get this answer?

10. Which statements are *true*?

A. The decimal 43.678 rounded to the nearest tenth is 43.6.

B. The decimal 43.678 rounded to the nearest tenth is 43.7.

C. The decimal 43.678 rounded to the nearest hundredth is 43.68.

D. The decimal 43.678 rounded to the nearest hundredth is 43.67.

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Name _____

What is a reasonable estimate for the sum or difference? Explain the strategy you used.

1. 9.86 + 4.30

___ + ___ = ___

2. 43.85 + 56.01

___ + ___ = ___

3. 3.92 + 6.14

___ + ___ = ___

4. 24.73 + 26.05

___ + ___ = ___

5. 8.32 − 5.9

___ − ___ = ___

6. 88.4 − 10.96

___ − ___ = ___

7. 16.28 − 5.9

___ − ___ = ___

8. 5.42 − 1.7

___ − ___ = ___

9. STEM Connection A baby rabbit weighs 24.8 grams. A veterinarian predicts the rabbit will weigh about 64.5 grams by the next visit. About how much weight will the rabbit gain?



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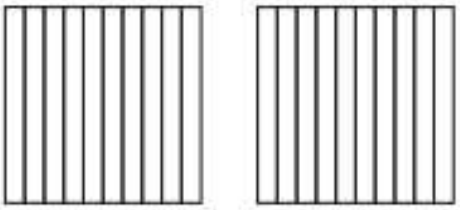
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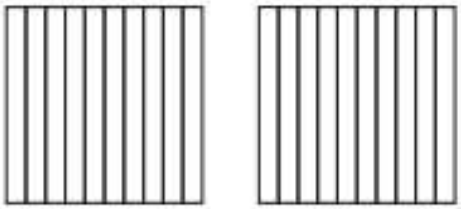
Name _____

What is the sum? Use the decimal grids.

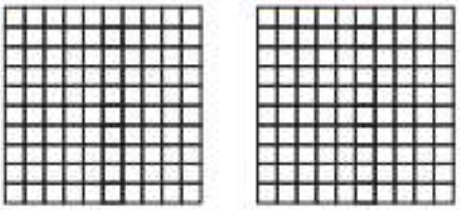
1. $0.7 + 0.1 =$ _____



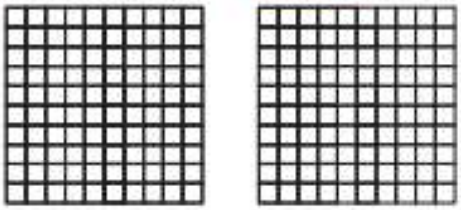
2. $0.5 + 0.8 =$ _____



3. $0.02 + 0.09 =$ _____



4. $0.78 + 0.64 =$ _____



What is the sum? Use decimal grids to show the sum.

5. $0.2 + 0.7 =$ _____

6. $0.5 + 0.6 =$ _____

7. $0.08 + 0.06 =$ _____

8. $0.79 + 0.84 =$ _____

9. $0.32 + 0.88 =$ _____

10. $0.46 + 0.29 =$ _____

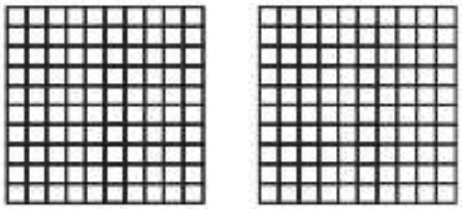
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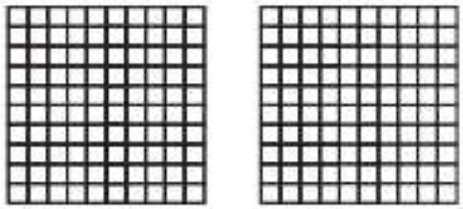
Name _____

What is the sum? Use the decimal grids to solve.

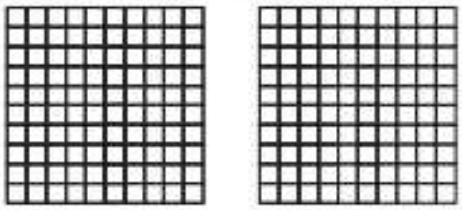
1. $0.9 + 0.02 =$ _____



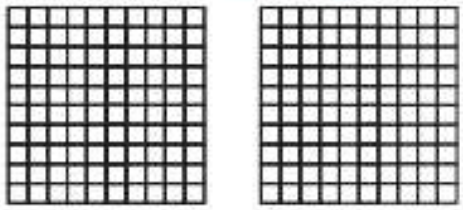
2. $0.14 + 0.5 =$ _____



3. $0.45 + 0.4 =$ _____



4. $0.6 + 0.09 =$ _____



What is the sum? Use decimal grids to solve.

5. $0.7 + 0.18 =$ _____

6. $0.86 + 0.5 =$ _____

7. $0.44 + 0.6 =$ _____

8. $0.1 + 0.89 =$ _____

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9. Adrian jumped 0.25 meter down a sidewalk. He jumped again and went an additional 0.3 meter. What is the total distance that Adrian jumped? Show your work.

10. Vi bought 1.4 pounds of pecans and 0.79 pound of almonds. What is the total weight of the nuts Vi bought?

11. **Error Analysis** Abe represented the expression 0.32 + 0.4 on this decimal grid. How do you respond to Abe?



12. **Extend Your Thinking** Sage has a fitness goal of traveling 1.6 miles each day. She bikes 0.3 mile. She then runs another 1.2 miles. Then, she swims 0.25 mile. Did Sage reach her goal? Explain how you can use a decimal grid to find your answer.

Reflect

How do you think like a mathematician when adding decimals?

Math is... Mindset

How have you connected with your classmates?

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How can you determine the total cost of the helicopter and robot?



$17.31



$12.45

Math is... Modeling

What equation can you use to represent the problem?

You can use partial sums to determine the total cost.

One Way Decompose by place value.

$$17.31 + 12.45 = c$$

$$10 + 7 + 0.3 + 0.01 \qquad 10 + 2 + 0.4 + 0.05$$

$10 + 10 = 20$

$7 + 2 = 9$

$0.3 + 0.4 = 0.7$ — Find partial sums

$0.01 + 0.05 = 0.06$

Add partial sums to find the sum

$20 + 9 + 0.7 + 0.06 = 29.76$

Another Way Decompose into whole numbers and decimals.

$$17.31 + 12.45 = c$$

$$17 + 0.31 \qquad 12 + 0.45$$

$17 + 12 = 29$ — Find partial sums

$0.31 + 0.45 = 0.76$

Add partial sums to find the sum

$29 + 0.76 = 29.76$

We can decompose decimals different ways to find partial sums.

Work Together

Michael drove 23.06 kilometers on Saturday and 16.38 kilometers on Sunday. What is the total distance he drove during the two days?

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On My Own

MATH REPLAY | GO ONLINE

Name _____

What is the sum? Use partial sums to solve.

1. $2.57 + 8.4$
   $= 2 + 0.5 + 0.07 + 8 + 0.4$
   $=$ _____

2. $6.9 + 0.31$
   $= 6 + 0.9 + 0.3 + 0.01$
   $=$ _____

3. $35.12 + 64.73 =$ _____

4. $70.34 + 21.52 =$ _____

5. $14.53 + 11.2 =$ _____

6. $104.75 + 21.9 =$ _____

7. Mattis earns $22.50 shoveling snow. Later, he finds $0.82 in his backpack. How much money does he have now?

8. Josh's suitcase weighs 13.4 pounds. Karen's suitcase weighs 21.63 pounds. What is the total weight of the two suitcases?

9. Kim's goal was to run at least 10 miles this week to train for her cross-country race. On Tuesday she ran 3.57 miles, and on Wednesday she ran 6.48 miles. Did Kim reach her goal? Explain.

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Learn

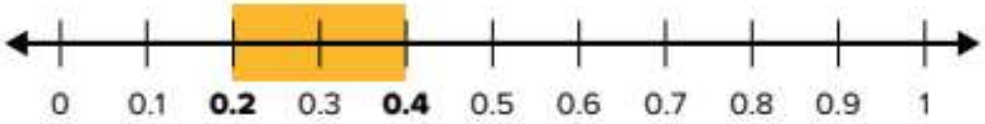
The table shows the decimals represented by different colors on a decimal grid.

Color	Decimal
Red	0.4
Green	0.2
Yellow	0.36
Purple	0.04

How can you determine how much more is shaded red than green? Yellow than purple?

Use a number line to find how much more is shaded red than green.

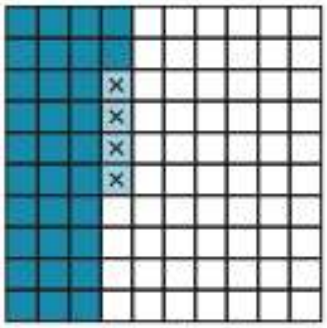
$0.4 - 0.2 = r$



There is 0.2 more shaded red than green.

Use a decimal grid to find how much more is shaded yellow than purple.

$0.36 - 0.04 = y$



There is 0.32 more shaded yellow than purple.

Math is... Precision

How is each quantity shown on the decimal grid?

You can use a number line or decimal grid to subtract decimals.

Work Together

How much greater is the mass of an emu egg than a chicken egg? Explain.



Chicken egg
0.06 kg



Emu egg
0.62 kg

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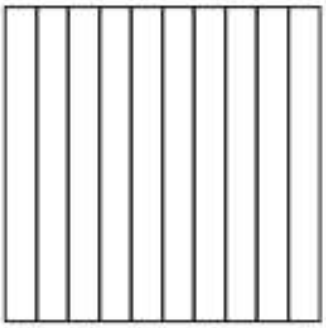
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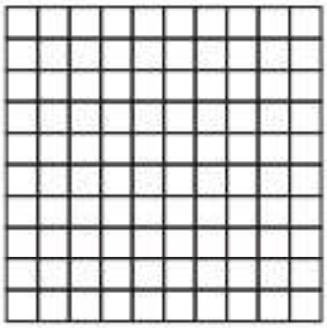
Name _____

What is the difference? Use the decimal grid to solve.

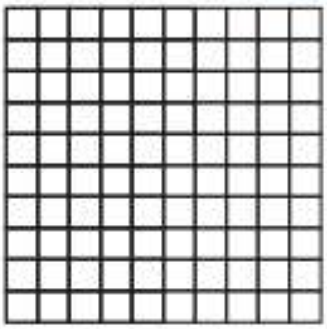
1. $0.7 - 0.1 =$ _____



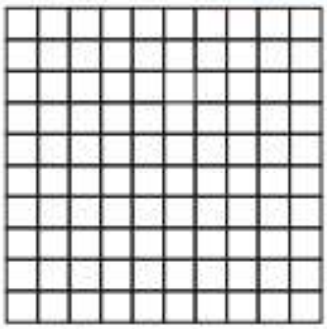
2. $0.09 - 0.02 =$ _____



3. $0.54 - 0.38 =$ _____



4. $0.25 - 0.11 =$ _____



What is the difference? Use a number line to solve.

5. $0.7 - 0.2 =$ _____

6. $0.6 - 0.4 =$ _____

7. Malik has $0.85. He bought a pencil for $0.50. Does he have enough money left to buy a folder for $0.30? Explain.

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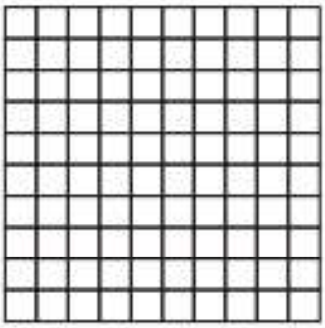
On My Own

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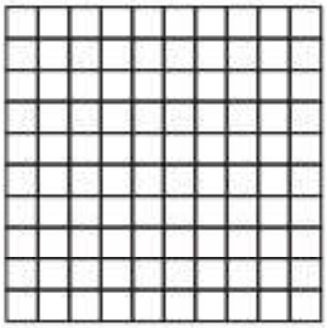
Name _____

What is the difference? Use the decimal grids to solve.

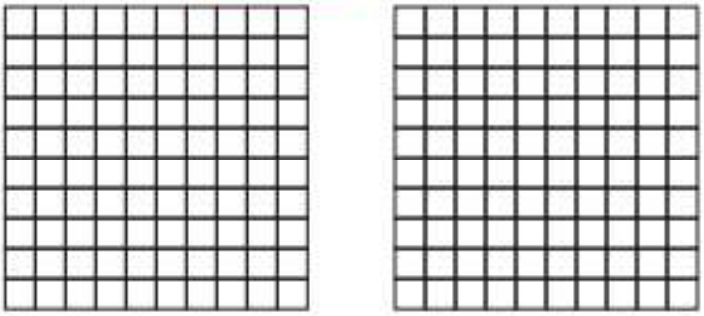
1. $0.54 - 0.1 =$ _____



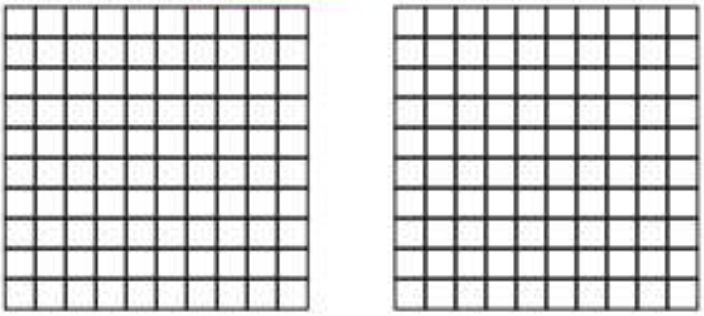
2. $0.9 - 0.02 =$ _____



3. $1.07 - 0.3 =$ _____



4. $1.28 - 0.7 =$ _____



What is the difference? Use decimal grids to solve.

5. $2.3 - 0.27 =$ _____

6. $2.7 - 1.68 =$ _____

7. $1.74 - 0.8 =$ _____

8. $2.25 - 1.8 =$ _____

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9. **STEM Connection** A veterinarian records the amounts of medicine given to three dogs. How much more medicine did the rottweiler receive than the chihuahua?

Dog Breed	Amount
Rottweiler	12.75 mL
Labrador	10.82 mL
Chihuahua	6.9 mL

10. Jana bought 1.66 pounds of roast beef and 0.8 pound of turkey at the deli. How much more roast beef than turkey did Jana buy?

11. **Error Analysis** Harry subtracts 0.3 from 0.88. He states that the difference cannot be greater than 0.5. Do you agree? Why or why not?

12. **Extend Your Thinking** Write two different expressions that have a difference of 0.4. Use hundredths in at least one of the expressions.

Reflect

How did decimal grids help you subtract decimals with different numbers of decimal places?

Math is... Mindset

How have you known when there is a problem?

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On My Own

MATH REPLAY | GO ONLINE

Name _____

Write the exponential form as a multiplication expression.

1. 10^4

2. 10^2

3. 10^3

4. 10^6

Write the exponential form.

5. $10 \times 10 \times 10 =$ _____

6. $10 \times 10 \times 10 \times 10 \times 10 =$ _____

7. $10 \times 10 \times 10 \times 10 =$ _____

8. $10 \times 10 =$ _____

Write the exponential form of each power of 10.

9. $10 =$ _____

10. $1{,}000 =$ _____

11. $100 =$ _____

12. $10{,}000 =$ _____

13. Rachel finds the value of 10^5 as shown. Do you agree with her solution? Tell why.

$10^5 = 10 \times 5 = 50$

14. **STEM Connection** Grace reviewed 10^6 lines of a computer program. How many lines did she review? Write the product.



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On My Own

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Name _____

What is the product? Use patterns to solve.

1. $12 \times 10 =$ _____
   $12 \times 100 =$ _____
   $12 \times 1{,}000 =$ _____

2. $24 \times 1{,}000 =$ _____
   $24 \times 10{,}000 =$ _____
   $24 \times 100{,}000 =$ _____

3. $33 \times 10^2 =$ _____
   $33 \times 10^3 =$ _____
   $33 \times 10^4 =$ _____

4. $57 \times 10^4 =$ _____
   $57 \times 10^5 =$ _____
   $57 \times 10^6 =$ _____

What is the product?

5. 23×10^3

6. 581×10^2

7. 60×10^4

8. 103×10^2

What is the unknown factor?

9. $571 \times$ _____ $= 5{,}710$

10. $43 \times$ _____ $= 4{,}300{,}000$

11. $6 \times$ _____ $= 6{,}000$

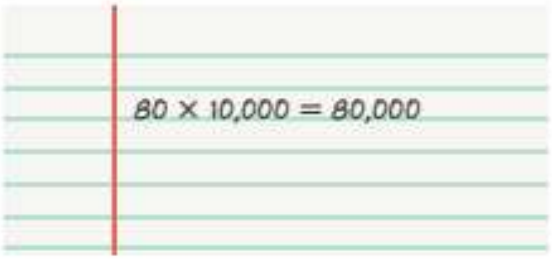
12. $28 \times$ _____ $= 280{,}000$

13. How can you describe the relationship between the equations shown?

    $6 \times 10^5 = 600{,}000$
    $6 \times 10^7 = 60{,}000{,}000$
    $6 \times 10^9 = 6{,}000{,}000{,}000$

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14. Error Analysis Carol says the equation that she wrote is correct. How do you respond to her?



15. Which equations are *true*? Circle all that apply.

A. $6 \times 100 = 6 \times 10 \times 10 \times 10$

B. $10{,}000 \times 4 = 10 \times 10 \times 10 \times 10 \times 4$

C. $15 \times 10^3 = 1{,}500$

D. $70 \times 10 \times 10 = 7{,}000$

16. Extend Your Thinking Find the unknown factor that is a whole number. Explain your thinking.

$$? \times 10^5 = 56{,}300{,}000$$

Reflect

What patterns did you notice when multiplying by powers of 10?

Math is... Mindset

How have you avoided getting distracted?

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Learn

On Saturday, 432 people go to the theater.

About how much money does the theater collect on Saturday?



You can use strategies you know to determine a reasonable estimate.

One Way Compatible numbers

432×13

$400 \times 15 = 4 \times 100 \times 15$
$= 4 \times 15 \times 100$
$= 6{,}000$

The theater collects about $6,000.

Another Way Rounded factors

432×13

$430 \times 10 = 4{,}300$

The theater collects about $4,300.

A reasonable estimate is between $4,300 and $6,000.

You can use these estimates to determine that the calculated solution of $5,616 is a reasonable answer.

Math is... Choosing Tools

What can and can't an estimated product tell you?

Estimated products can help you determine whether calculations are reasonable.

Work Together

Estimate the product of 879×36.

Which strategy did you use? Explain why.

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On My Own

MATH REPLAY | GO ONLINE

Name _____

Estimate the product.

1. 643 × 18

2. 325 × 62

3. 438 × 27

4. 572 × 49

5. On a school trip, 54 students went to a museum. Each ticket cost $23. About how much did all students spend on tickets?

6. The town library has 478 shelves. Each shelf holds 38 books. About how many books does the library have?

7. A vendor at a fair is selling her paintings for $23 each. Over the course of the fair, 339 people purchase her paintings. About how much did the vendor earn over the course of the fair?

8. The fifth graders sold 405 baked goods at the bake sale. About how much did the fifth graders earn?



9. **Error Analysis** Han estimates that the product of 492 and 32 will be 1,200. How do you respond to Han?

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On My Own

Name _____

Complete the area model. Then solve to find the product.

1.

	100	+ 50	+ 4
30	3,000		
+ 6	600		

2.

	400	+ 20	+ 1
50	20,000		50
+ 2			

What is the product? Use area models to solve.

3. $15 \times 24 =$ _____

	24
15	

4. $28 \times 132 =$ _____

	132
28	

5. $33 \times 78 =$ _____

6. $72 \times 225 =$ _____

Write the multiplication equation based on the area model. Then solve to find the product.

7.

	200	+ 10	+ 8
20			
+ 8			

8.

	400	+ 10	+ 6
60			
+ 3			

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On My Own

MATH REPLAY | GO ONLINE

Name _____

Find the unknown partial products. Then find the product.

1.

$$\begin{array}{r} 325 \\ \times \quad 73 \\ \hline 21{,}000 \\ 1{,}400 \\ 350 \\ \square \\ \square \\ + \quad \square \\ \hline \square \end{array}$$

2.

$$\begin{array}{r} 104 \\ \times \quad 28 \\ \hline 32 \\ 800 \\ \square \\ + \quad \square \\ \hline \square \end{array}$$

What is the product? Use partial products to solve.

3.

$$\begin{array}{r} 17 \\ \times 86 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 24 \\ \times 129 \\ \hline \end{array}$$

5.

$$\begin{array}{r} 36 \\ \times 93 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 222 \\ \times 58 \\ \hline \end{array}$$

7. A sporting goods store sold 24 mountain bikes. How much money did they make selling bikes?



8. The store also sold 12 mountain bike and scooter packages each for $367. How much money did they make?

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On My Own

MATH REPLAY | GO ONLINE

Name _____

What is the product?

1. $\begin{array}{r} 327 \\ \times \quad 6 \\ \hline \end{array}$

2. $\begin{array}{r} 543 \\ \times \quad 8 \\ \hline \end{array}$

3. $\begin{array}{r} 1{,}931 \\ \times \quad 5 \\ \hline \end{array}$

4. $\begin{array}{r} 3{,}462 \\ \times \quad 4 \\ \hline \end{array}$

What is the product? Choose the correct answer.

5. $188 \times 7 = s$

   A. $s = 1{,}300$

   B. $s = 1{,}316$

   C. $s = 1{,}388$

   D. $s = 1{,}406$

6. $237 \times 9 = v$

   A. $v = 2{,}033$

   B. $v = 2{,}163$

   C. $v = 2{,}153$

   D. $v = 2{,}133$

7. $2{,}623 \times 2 = y$

   A. $y = 5{,}246$

   B. $y = 4{,}246$

   C. $y = 5{,}126$

   D. $y = 5{,}616$

8. $5{,}246 \times 3 = r$

   A. $r = 15{,}882$

   B. $r = 16{,}838$

   C. $r = 16{,}612$

   D. $r = 15{,}738$

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On My Own

MATH REPLAY | GO ONLINE

Name _____

Write the multiplication expression using factors of 10. Then, find the value.

1. 3.6×10^2

2. 7.2×10^3

3. 4.8×10^4

4. 1.9×10^2

5. Ashley rides the train to visit her grandmother. She lives 1.2×10^2 miles away from her grandmother. How many miles does she travel?

6. Juan walks 4.7×10^3 meters from his house to the museum. Mary walks 9.3×10^2 meters from her house to the museum. Who walks farther, Juan or Mary? How do you know?

7. **Error Analysis** Sasha multiplied the decimals as shown. How can you help Sasha understand the patterns in multiplying decimals by powers of 10?

$3.5 \times 10^2 = 3{,}500$
$3.5 \times 10^3 = 35{,}000$
$3.5 \times 10^4 = 350{,}000$

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On My Own

MATH REPLAY | GO ONLINE

Name _____

Estimate each product by rounding. Show your work.

1. $5.73 \times 3.16 = ?$
2. $6.23 \times 3.87 = ?$
3. $13.6 \times 9.82 = ?$
4. $40.55 \times 7.89 = ?$
5. $19.91 \times 28.75 = ?$
6. $24.09 \times 12.57 = ?$

Estimate each product by finding a range. Show your work.

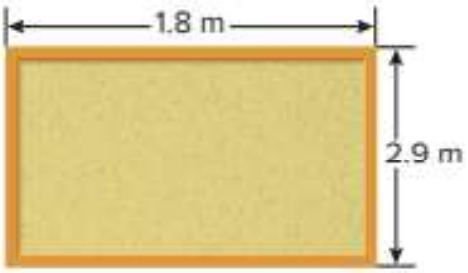
7. $4.93 \times 7.88 = ?$
8. $3.29 \times 3.81 = ?$
9. $7.77 \times 10.8 = ?$
10. $4.1 \times 13.5 = ?$
11. $20.11 \times 9.96 = ?$
12. $16.12 \times 3.55 = ?$

13. Bryce is buying 4.3 kilograms of apples. The store charges $1.79 per kilogram for apples. About how much will the apples cost? Explain which estimation strategy you used.

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Learn

How can you find the area of the board?



You can use the equation $1.8 \times 2.9 = A$ to represent the problem.

You can use an area model to help you solve the equation.

Decompose each factor and find partial products.

Decompose by place value.

	2	+	0.9
1	$2 \times 1 = 2$		$0.9 \times 1 = 0.9$
+			
0.8	$2 \times 0.8 = 1.6$		$0.9 \times 0.8 = 0.72$

Find partial products by finding the area of each rectangle.

Add partial products.

$2 + 0.9 + 1.6 + 0.72 = 5.22$

The area of the board is 5.22 square meters.

Math is... Modeling

How are the area models for decimals and whole numbers similar?

One multiplication strategy for multiplying decimals is to use an area model to determine partial products, which are then added to determine the product.

Work Together

A teacher bought 18 rulers. What was the total cost of the rulers? Use an area model to solve.



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On My Own

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Name _____

What is the product? Use an area model to solve.

1. $32 \times 1.5 =$ _____

2. $14 \times 2.3 =$ _____

3. $7.1 \times 8 =$ _____

4. $6.2 \times 1.5 =$ _____

5. $9.6 \times 5.5 =$ _____

6. $1.9 \times 2.4 =$ _____

7. A tent repair shop charges $9.50 for every 1 meter of stitching repaired on a tent. Michael brings in his tent for repairs. It needs 1.2 meters of stitching. How much will the repairs cost him?

8. **Error Analysis** Evelyn used an area model to multiply 7.4×1.2 as shown. How do you respond to her work?

	1	+	2
7	$7 \times 1 = 7$		$7 \times 2 = 14$
+			
4	$4 \times 1 = 4$		$4 \times 2 = 8$

$7 + 14 + 4 + 8 = 33$

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On My Own

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Name _____

Complete each sentence.

1. 3.8 is _____ of 38.

   So, 3.8 × 25 is _____ of the product 38 × 25.

2. 0.45 is _____ of 45.

   So, 0.45 × 16 is _____ of the product 45 × 16.

3. 7.8 is _____ of 78 and 9.2 is _____ of 92.

   So, 7.8 × 9.2 is _____ of the product 78 × 92.

What is the product? Use patterns to solve.

4. 45 × 17 = 765
   45 × 1.7 = _____
   45 × 0.17 = _____

5. 32 × 14 = _____
   32 × 1.4 = 44.8
   3.2 × 1.4 = _____

6. 16 × 89 = 1,424
   16 × 8.9 = _____
   16 × 0.89 = _____

7. 61 × 22 = _____
   6.1 × 22 = 134.2
   6.1 × 2.2 = _____

8. 96 × 55 = _____
   96 × 5.5 = _____
   9.6 × 5.5 = 52.8

9. 19 × 42 = _____
   1.9 × 42 = 79.8
   1.9 × 4.2 = _____

10. 67 × 34 = _____
    67 × 3.4 = _____
    6.7 × 3.4 = _____

11. 82 × 67 = _____
    82 × 6.7 = _____
    8.2 × 6.7 = _____

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On My Own

Name _____

Use a basic fact and patterns to solve.

1. $15 \div$ _____ $= 5$

   $150 \div 30 =$ _____

   _____ $\div 30 = 50$

   $15{,}000 \div$ _____ $=$ _____

2. $32 \div 8 =$ _____

   _____ $\div 80 =$ _____

   $3{,}200 \div$ _____ $=$ _____

   _____ $\div$ _____ $=$ _____

3. $20{,}000 \div 40 =$ _____

4. $15{,}000 \div 30 =$ _____

5. $18{,}000 \div 60 =$ _____

6. $16{,}000 \div 80 =$ _____

7. $8{,}000 \div 40 =$ _____

8. $25{,}000 \div 50 =$ _____

9. $32{,}000 \div 80 =$ _____

10. $9{,}000 \div 30 =$ _____

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On My Own

MATH REPLAY | GO ONLINE

Name _____

Estimate the quotient.

1. 2,400 ÷ 34

2. 3,500 ÷ 65

3. 1,800 ÷ 92

4. 4,800 ÷ 86

5. 6,390 ÷ 31

6. 4,988 ÷ 19

7. 809 ÷ 10

8. 9,598 ÷ 11

9. **Error Analysis** Cho writes this equation. Is her calculation reasonable? Explain.

9,025 ÷ 25 = 3,610

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Learn

Rahim will fill bags with tortillas. He has bags that hold 12 tortillas and bags that hold 16 tortillas.

Which size bag should he use if he wants no tortillas left over?



276 tortillas

If Rahim uses the bags that hold 16 tortillas,

$276 \div 16 = b$.

$$\begin{array}{r|l} 16\overline{)276} & \\ -160 & 10 \\ \hline 116 & \\ -112 & 7 \\ \hline 4 & 17 \end{array}$$

The **remainder** is 4.

He will have 4 tortillas left over.

Math is... Reasonableness

How can you check your solution when there is a remainder?

If Rahim uses the bags that hold 12 tortillas,

$276 \div 12 = t$.

$$\begin{array}{r|l} 12\overline{)276} & \\ -240 & 20 \\ \hline 36 & \\ -36 & 3 \\ \hline 0 & 23 \end{array}$$

The remainder is 0.

He will have no tortillas left over.

Rahim should use bags of 12 tortillas.

You can use partial quotients to divide. Sometimes the quotient has a remainder.

Work Together

What is the quotient?

$89\overline{)1{,}250}$

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On My Own

MATH REPLAY | GO ONLINE

Name _____

What is the quotient?

1. $754 \div 13 =$ _____

2. $1{,}426 \div 46 =$ _____

3. $975 \div 64 =$ _____

4. $2{,}246 \div 27 =$ _____

5. **Error Analysis** Is this division correct? If not, explain the error and find the correct quotient.

$$
\begin{array}{r|l}
84\overline{)3{,}115} & \\
-2{,}520 & 30 \\
\hline
595 & \\
-504 & 6 \\
\hline
91 & 36
\end{array}
$$

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