DIGITAL PRACTICE WORKSHEET

HOW DO YOU COMPLETE THESE DIGITAL WORKSHEETS?

QUESTION TYPE #1:
THERE ARE TEXT BOXES WHERE YOU WILL CLICK AND TYPE YOUR ANSWER IN. IT MAY BE A WHITE TEXT BOX YOU DO NOT SEE, OR A YELLOW SHADED BOX WITH A TEXT BOX INSIDE OR A BOX THAT SAYS "ANSWER HERE" OR "TEXT". TRY IT! FIND THE TEXT BOX HERE AND TYPE SOMETHING! THERE ARE THREE OF THEM!!!

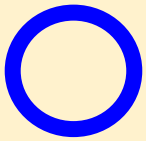
ANSWER HERE:

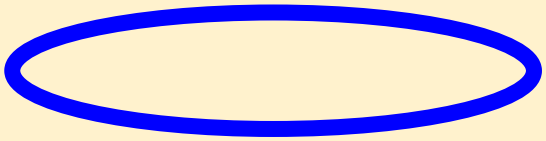
ANSWER HERE!

TEXT

QUESTION TYPE #2:
THERE WILL BE DRAG AND DROP ITEMS SUCH AS CIRCLE, OVALS, BOXES AND LINES. TRY IT! MOVE THE ITEMS TO COVER THE CORRECT REQUEST!

CIRCLE THIS LETTER: A





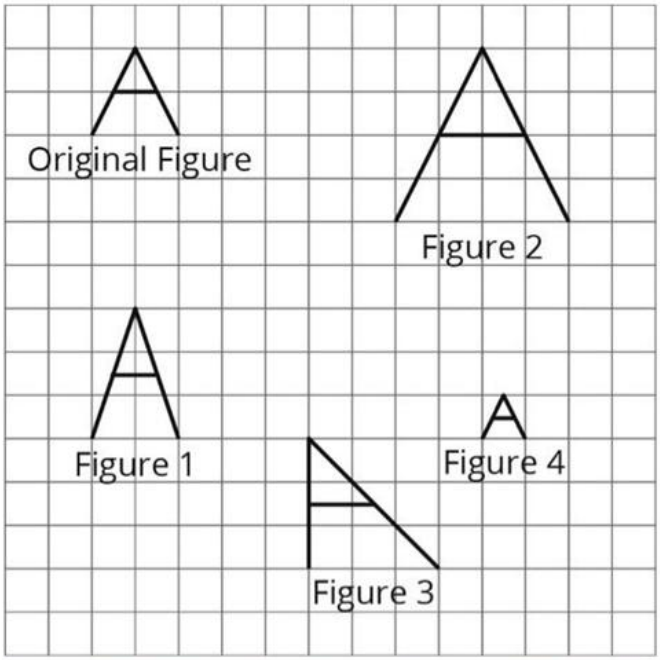
OVAL THIS SENTENCE!

PUT 2 LINES TOGETHER TO MAKE A BOX! YOU CAN ADJUST THE SIZES!

QUESTION TYPE #3:
YOU WILL BE REQUIRED TO SUBMIT DRAWINGS! YOU CAN SCAN, TAKE A PICTURE AND SEND IT OR DO IT DIGITALLY (IF YOU CANNOT DO IT IN PERSON)!. LET'S PRACTICE THEM TOGETHER!

Unit 1 Lesson 1 Cumulative Practice Problems

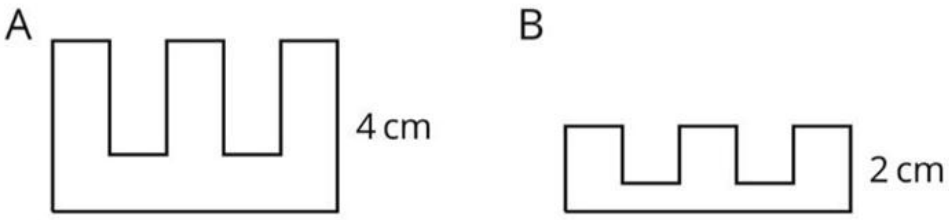
1. Here is a figure that looks like the letter A, along with several other figures. Which figures are scaled copies of the original A? Explain how you know.



Write answer here!

2. Tyler says that Figure B is a scaled copy of Figure A because all of the peaks are half as tall.

Do you agree with Tyler? Explain your reasoning.



Write answer here!

3. Here is a picture of the Rose Bowl Stadium in Pasadena, CA.

Here are some copies of the picture. Select **all** the pictures that are scaled copies of the original picture.

Write Yes or No

A. text

B. text

C. text

D. text

A

B

C

D

4. Complete each equation with a number that makes it true.

a. $5 \cdot$ text $= 15$

b. $4 \cdot$ text $= 32$

c. $6 \cdot$ text $= 9$

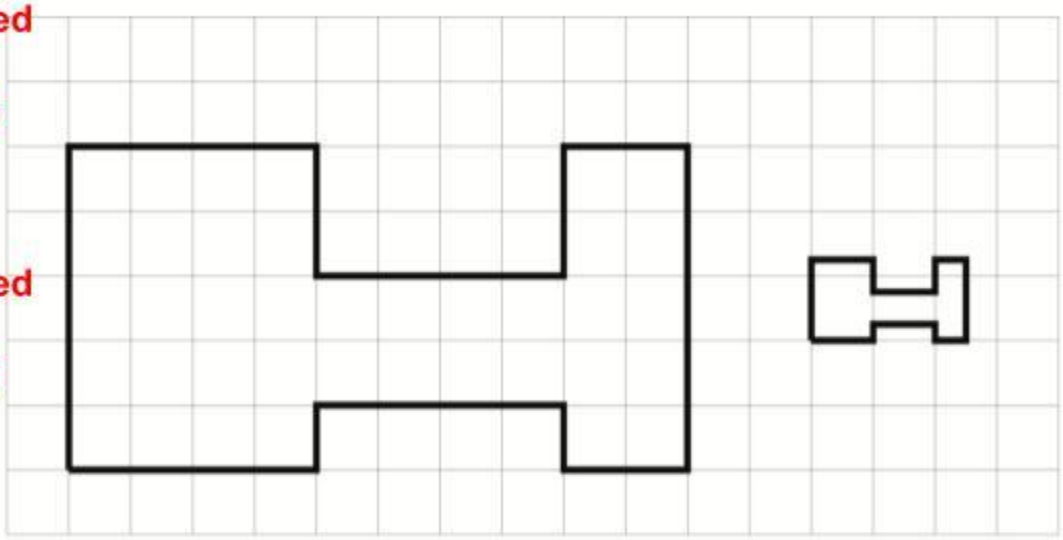
d. $12 \cdot$ text $= 3$

Unit 1 Lesson 2 Cumulative Practice Problems

1. The second H-shaped polygon is a scaled copy of the first.

Drag the colored circles to the corresponding points.

Drag the colored lines to the corresponding sides.



a. Show one pair of corresponding points and two pairs of corresponding sides in the original polygon and its copy. Consider using colored pencils to highlight corresponding parts or labeling some of the vertices.

b. What scale factor takes the original polygon to its smaller copy? Explain or show your reasoning.

Answer here:

2. Figure B is a scaled copy of Figure A. Select **all** of the statements that must be true:

A. Figure B is larger than Figure A.

B. Figure B has the same number of edges as Figure A.

C. Figure B has the same perimeter as Figure A.

D. Figure B has the same number of angles as Figure A.

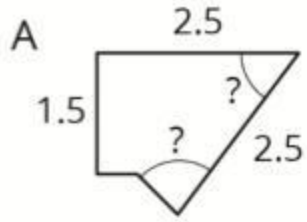
E. Figure B has angles with the same measures as Figure A.

Drag the circles and place them around the correct letter you choose to be true:

3. Polygon B is a scaled copy of Polygon A.

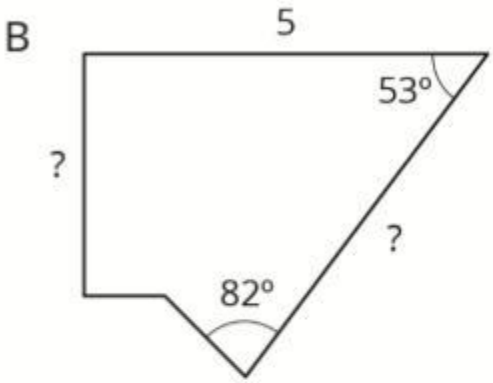
a. What is the scale factor from Polygon A to Polygon B? Explain your reasoning.

Answer here:



b. Find the missing length of each side marked with ? in Polygon B.

Answer here:



c. Determine the measure of each angle marked with ? in Polygon A.

Answer here:

4. Complete each equation with a number that makes it true.

a. $8 \cdot$ text _____ $= 40$

b. $8 +$ text _____ $= 40$

c. $21 \div$ text _____ $= 7$

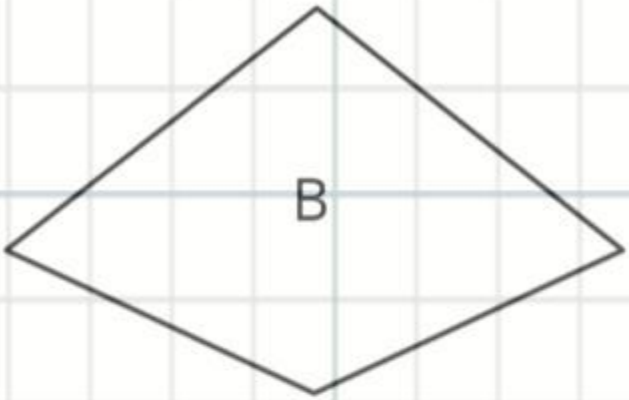
d. $21 -$ text _____ $= 7$

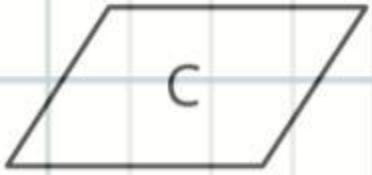
e. $21 \cdot$ text _____ $= 7$

Unit 1 Lesson 3 Cumulative Practice Problems

1. Here are 3 polygons.

Use the included lines and adjust as needed.





Draw a scaled copy of Polygon A using a scale factor of 2.

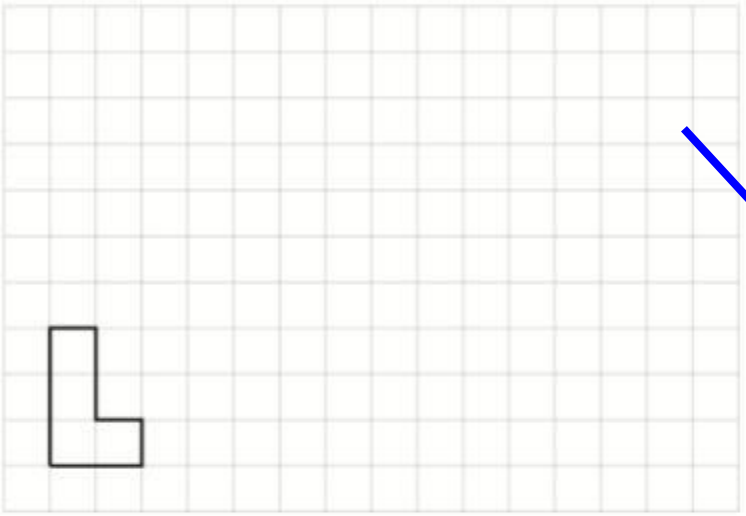
Draw a scaled copy of Polygon B using a scale factor of $\frac{1}{2}$.

Draw a scaled copy of Polygon C using a scale factor of $\frac{3}{2}$.

2. Quadrilateral A has side lengths 6, 9, 9, and 12. Quadrilateral B is a scaled copy of Quadrilateral A, with its shortest side of length 2. What is the perimeter of Quadrilateral B?

Answer here:

3. Here is a polygon on a grid.

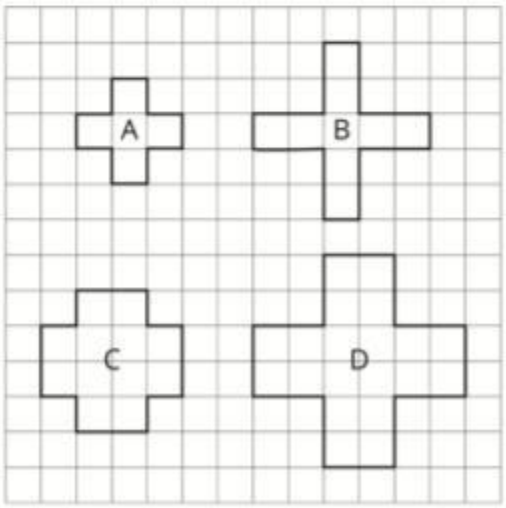


Use the following lines to draw the scaled copy.

Draw a scaled copy of this polygon that has a perimeter of 30 units. What is the scale factor? Explain how you know.

Answer here:

4. Priya and Tyler are discussing the figures shown below. Priya thinks that B, C, and D are scaled copies of A. Tyler says B and D are scaled copies of A. Do you agree with Priya, or do you agree with Tyler? Explain your reasoning.



Answer here:

(From Unit 1, Lesson 1.)

Unit 2 Lesson 5 Cumulative Practice Problems

1. Each of these is a pair of equivalent ratios. For each pair, explain why they are equivalent ratios or draw a diagram that shows why they are equivalent ratios.

a. $4 : 5$ and $8 : 10$

b. $18 : 3$ and $6 : 1$

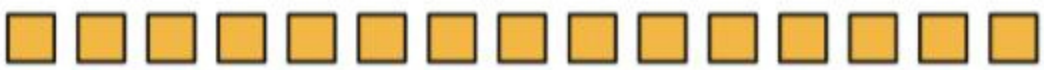
a. $2 : 7$ and $10{,}000 : 35{,}000$

2. Explain why $6 : 4$ and $18 : 8$ are not equivalent ratios.

3. Are the ratios $3 : 6$ and $6 : 3$ equivalent? Why or why not?

4. This diagram represents 3 batches of light yellow paint. Draw a diagram that represents 1 batch of the same shade of light yellow paint.

white paint (cups) 

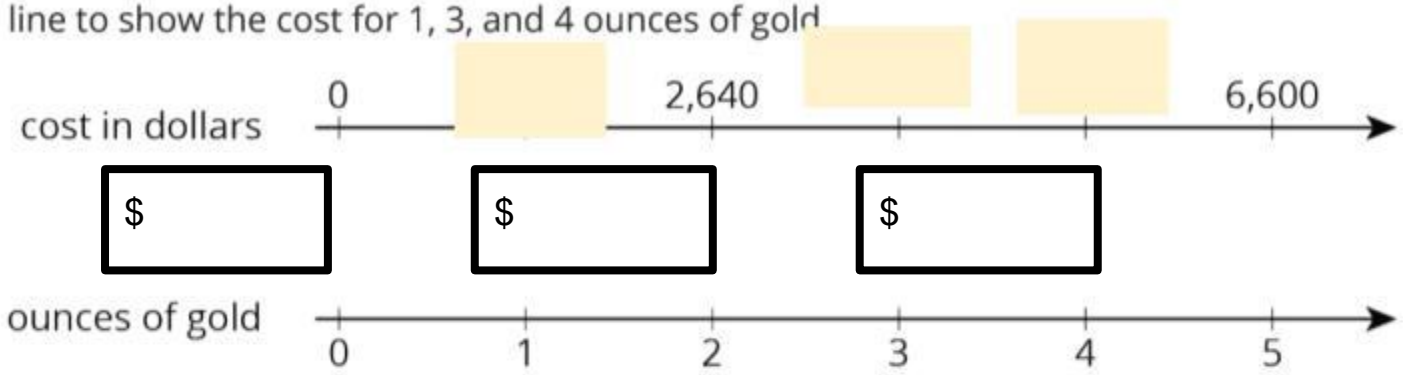
yellow paint (cups) 

(From Unit 2, Lesson 4.)

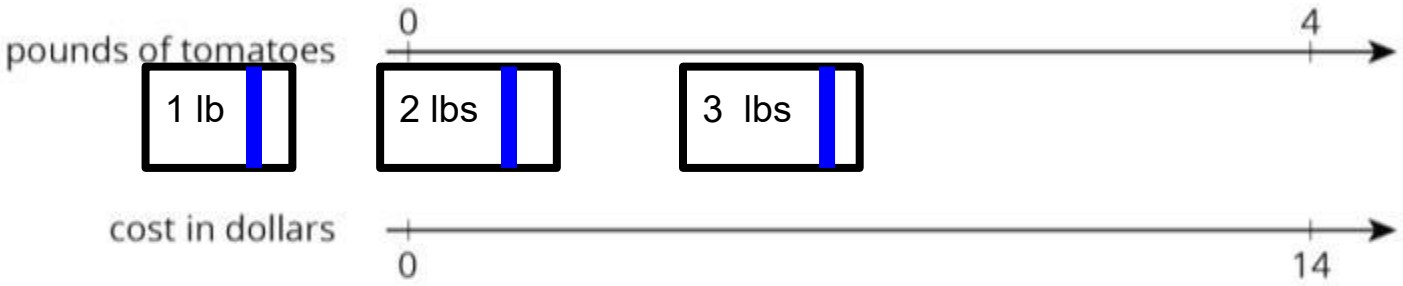
6.2.5

Unit 2 Lesson 8 Cumulative Practice Problems

1. In 2016, the cost of 2 ounces of pure gold was $2,640. Complete the double number line to show the cost for 1, 3, and 4 ounces of gold



2. The double number line shows that 4 pounds of tomatoes cost $14. Draw tick marks and write labels to show the prices of 1, 2, and 3 pounds of tomatoes.



Drag the labeled tick marks to the correct pounds placement.

Drag the $ text box to the correct place on the cost in $ and write the correct amount.

$$?? $$?? $$??

3. 4 movie tickets cost $48. At this rate, what is the cost of:

a. 5 movie tickets?

Explain or show your work:

b. 11 movie tickets?

Explain or show your work:

4. Priya bought these items at the grocery store. Find each unit price.

a. 12 eggs for $3. How much is the cost per egg?

Answer and explain or show your work:

b. 3 pounds of peanuts for $7.50. How much is the cost per pound?

Answer and explain or show your work:

c. 4 rolls of toilet paper for $2. How much is the cost per roll?

Answer and explain or show your work:

d. 10 apples for $3.50. How much is the cost per apple?

Answer and explain or show your work:

5. Clare made a smoothie with 1 cup of yogurt, 3 tablespoons of peanut butter, 2 teaspoons of chocolate syrup, and 2 cups of crushed ice.

a. Kiran tried to double this recipe. He used 2 cups of yogurt, 6 tablespoons of peanut butter, 5 teaspoons of chocolate syrup, and 4 cups of crushed ice. He didn't think it tasted right. Describe how the flavor of Kiran's recipe compares to Clare's recipe.

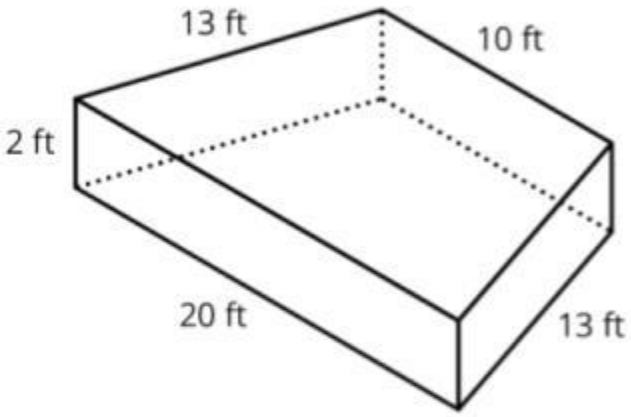
Answer here:

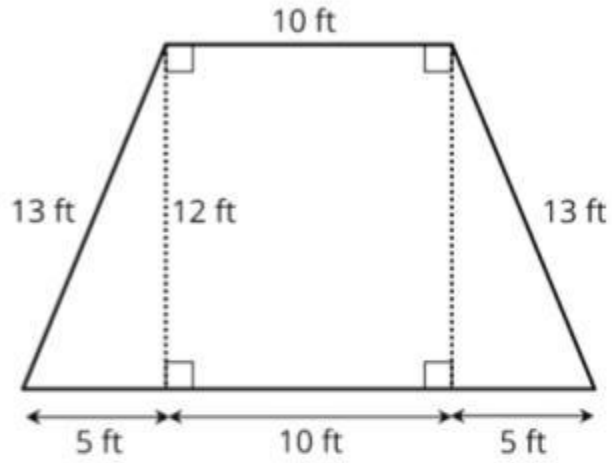
b. How should Kiran change the quantities that he used so that his smoothie tastes just like Clare's?

Answer here:

(From Unit 2, Lesson 3.)

6. A drama club is building a wooden stage in the shape of a trapezoidal prism. The height of the stage is 2 feet. Some measurements of the stage are shown here.





What is the area of all the faces of the stage, excluding the bottom? Show your reasoning. If you get stuck, consider drawing a net of the prism.

(From Unit 1, Lesson 15.)

All work goes here:

Unit 2 Lesson 11 Cumulative Practice Problems

6.2.11

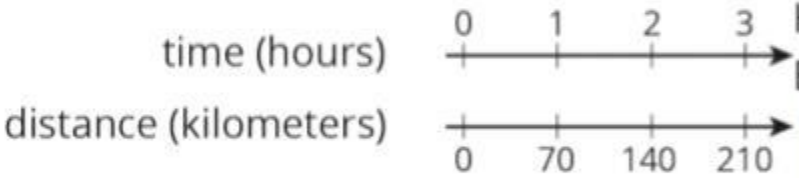
1. Complete the table to show the amounts of yellow and red paint needed for different-sized batches of the same shade of orange paint.

yellow paint (quarts)	red paint (quarts)
5	6
text	text
Text	Text
Text	Text

Explain how you know that these amounts of yellow paint and red paint will make the same shade of orange as the mixture in the first row of the table.

Answer here:

2. A car travels at a constant speed, as shown on the double number line.



How far does the car travel in 14 hours? Explain or show your reasoning.

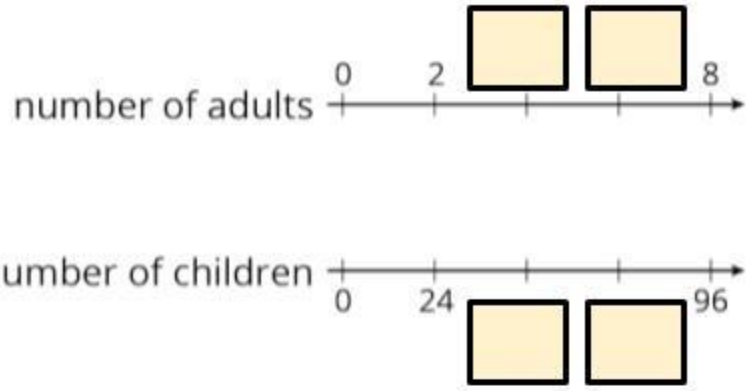
Answer here:

3. The olive trees in an orchard produce 3,000 pounds of olives a year. It takes 20 pounds of olives to make 3 liters of olive oil. How many liters of olive oil can this orchard produce in a year? If you get stuck, consider using the table.

olives (pounds)	olive oil (liters)
20	3
100	Text
3,000	Text

Answer here and explain your work:

4. At a school recess, there needs to be a ratio of 2 adults for every 24 children on the playground. The double number line represents the number of adults and children on the playground at recess.



a. Label each remaining tick mark with its value.

b. How many adults are needed if there are 72 children? Circle your answer on the double number line.

(From Unit 2, Lesson 6.)

Insert this circle on the number line:

5. While playing basketball, Jada's heart rate goes up to 160 beats per minute. While jogging, her heart beats 25 times in 10 seconds. Assuming her heart beats at a constant rate while jogging, which of these activities resulted in a higher heart rate? Explain your reasoning.

Answer here:

6. A shopper bought the following items at the farmer's market:

a. 6 ears of corn for $1.80. What was the cost per ear?

Answer and explain:

b. 12 apples for $2.88. What was the cost per apple?

Answer and explain:

c. 5 tomatoes for $3.10. What was the cost per tomato?

Answer and explain:

Unit 2 Lesson 14 Cumulative Practice Problems

6.2.14

1. A chef is making pickles. He needs 15 gallons of vinegar. The store sells 2 gallons of vinegar for $3.00 and allows customers to buy any amount of vinegar. Decide whether each of the following ratios correctly represents the price of vinegar.

   a. 4 gallons to $3.00

   b. 1 gallon to $1.50

   c. 30 gallons to $45.00

   d. $2.00 to 30 gallons

   e. $1.00 to $\frac{2}{3}$ gallon

Write Yes or no next to each letter.

2. A caterer needs to buy 21 pounds of pasta to cater a wedding. At a local store, 8 pounds of pasta cost $12. How much will the caterer pay for the pasta there?

   a. Write a ratio for the given information about the cost of pasta.

   b. Would it be more helpful to write an equivalent ratio with 1 pound of pasta as one of the numbers, or with $1 as one of the numbers? Explain your reasoning, and then write that equivalent ratio.

   c. Find the answer and explain or show your reasoning.

3. Lin is reading a 47-page book. She read the first 20 pages in 35 minutes.

a. If she continues to read at the same rate, will she be able to complete this book in under 1 hour?

Write your answer and explain:

b. If so, how much time will she have left? If not, how much more time is needed? Explain or show your reasoning.

Write your answer here and explain:

4. Diego can type 140 words in 4 minutes.

a. At this rate, how long will it take him to type 385 words?

Answer and explain how you got your answer.

b. How many words can he type in 15 minutes?

If you get stuck, consider creating a table.

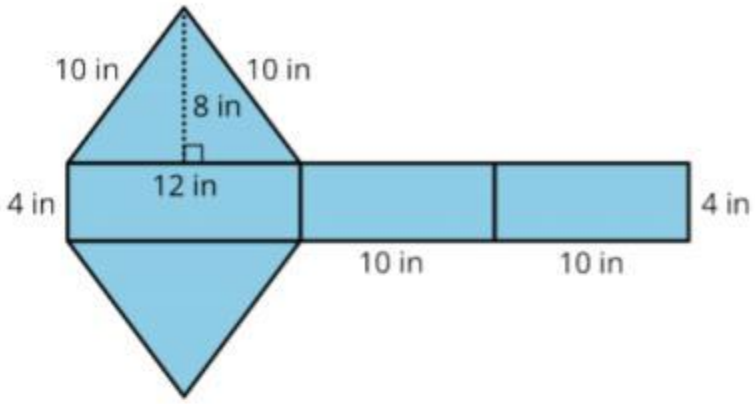
Answer:

5. A train that travels 30 miles in $\frac{1}{3}$ hour at a constant speed is going faster than a train that travels 20 miles in $\frac{1}{2}$ hour at a constant speed. Explain or show why.

Answer and explain or show your answer:

(From Unit 2, Lesson 10.)

6. Find the surface area of the polyhedron that can be assembled from this net. Show your reasoning.



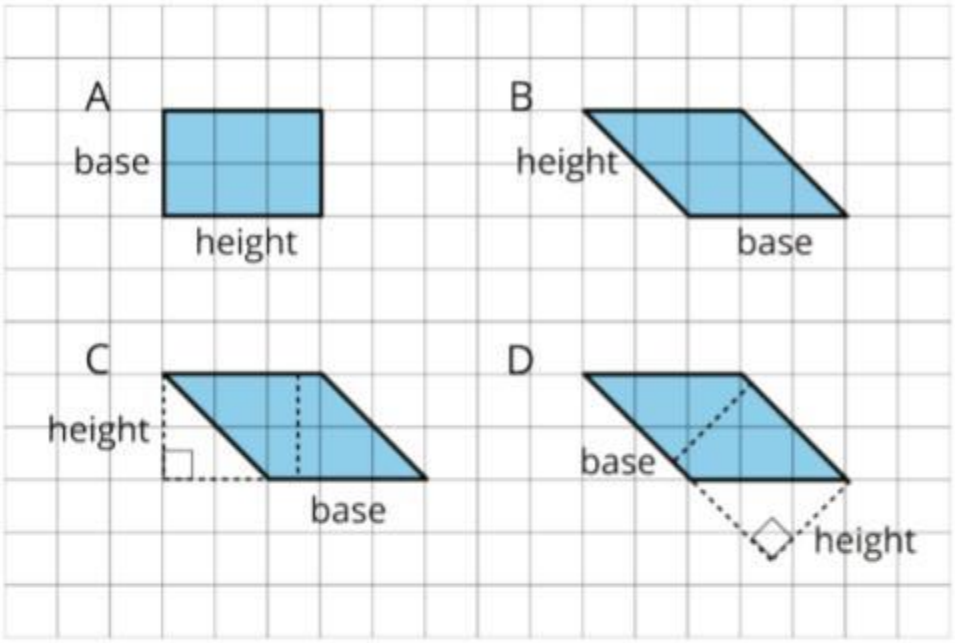
(From Unit 1, Lesson 14.)

Answer and explain or show your work:

Unit 1 Lesson 5 Cumulative Practice Problems

6.1.5

1. Select **all** parallelograms that have a correct height labeled for the given base.



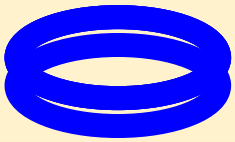
A. A

B. B

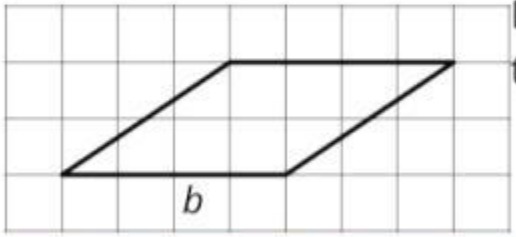
C. C

D. D

Use the circles below to circle the correct answers.

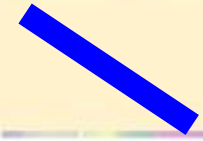


2. The side labeled b has been chosen as the base for this parallelogram.

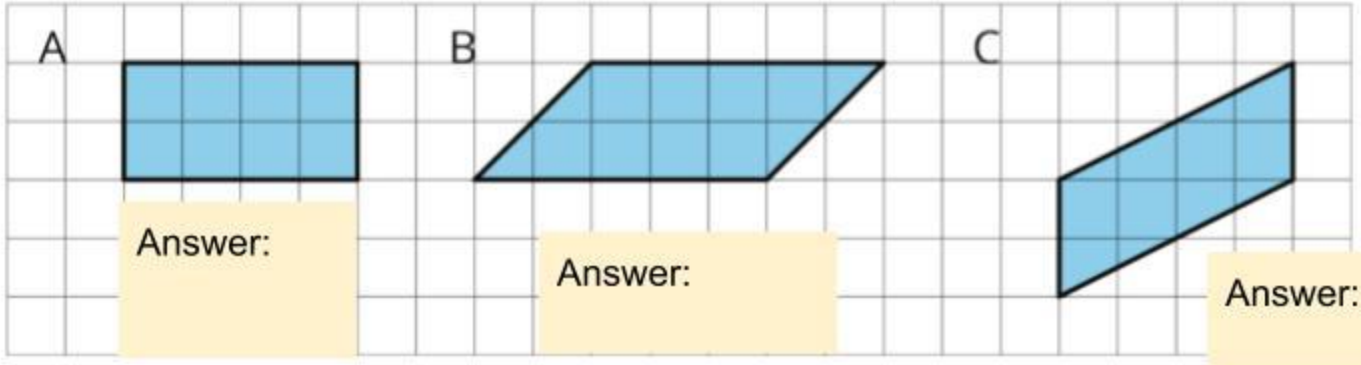


Draw a segment showing the height corresponding to that base.

Use the line below to draw the base.



3. Find the area of each parallelogram.

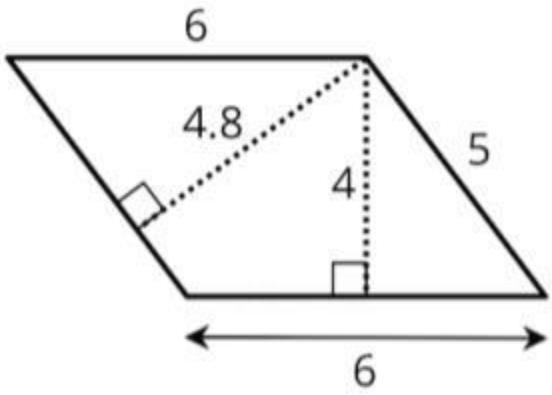


Answer:

Answer:

Answer:

4. If the side that is 6 units long is the base of this parallelogram, what is its corresponding height?



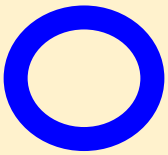
A. 6 units

B. 4.8 units

C. 4 units

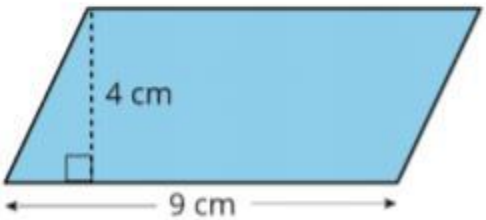
D. 5 units

Circle the correct answer:



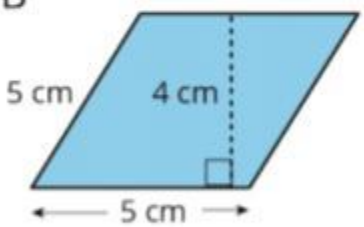
5. Find the area of each parallelogram.

A



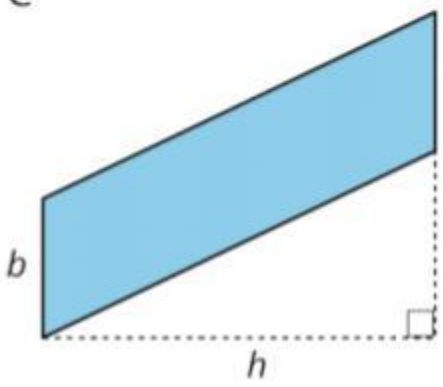
Answer:

B



Answer:

C



Answer:

6. Do you agree with each of these statements? Explain your reasoning.

a. A parallelogram has six sides.

b. Opposite sides of a parallelogram are parallel.

c. A parallelogram can have one pair or two pairs of parallel sides.

d. All sides of a parallelogram have the same length.

e. All angles of a parallelogram have the same measure.

(From Unit 1, Lesson 4.)

7. A square with an area of 1 square meter is decomposed into 9 identical small squares. Each small square is decomposed into two identical triangles.

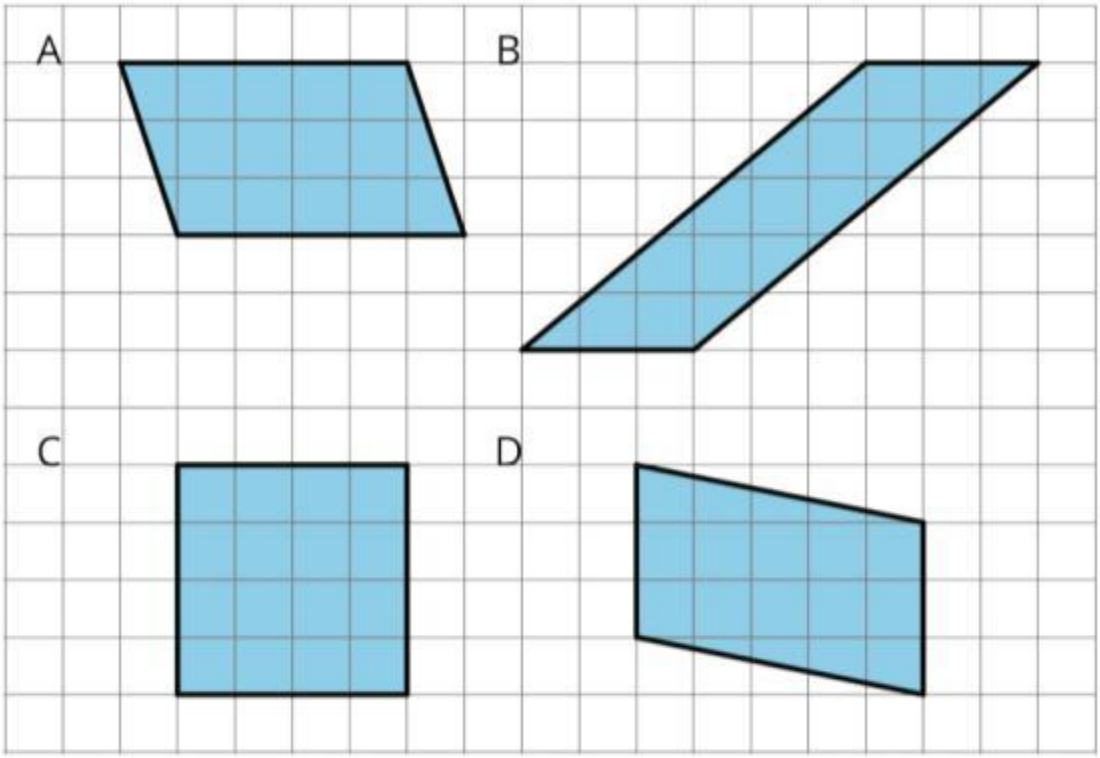
a. What is the area, in square meters, of 6 triangles? If you get stuck, consider drawing a diagram.

b. How many triangles are needed to compose a region that is $1\frac{1}{2}$ square meters?

(From Unit 1, Lesson 2.)

Unit 1 Lesson 6 Cumulative Practice Problems

1. Which three of these parallelograms have the same area as each other?



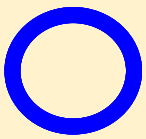
A. A

B. B

C. C

D. D

Circle the correct answers:



2. Which pair of base and height produces the greatest area? All measurements are in centimeters.

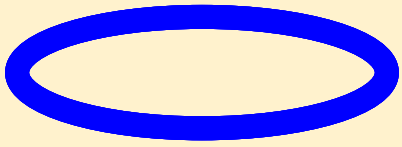
A. $b = 4, h = 3.5$

B. $b = 0.8, h = 20$

C. $b = 6, h = 2.25$

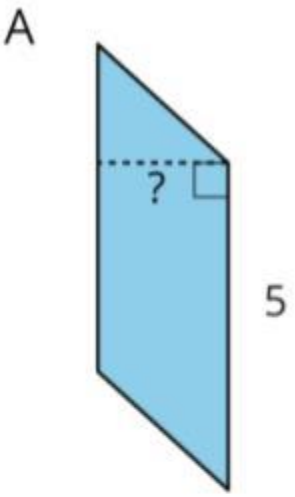
D. $b = 10, h = 1.4$

Circle the correct answers:



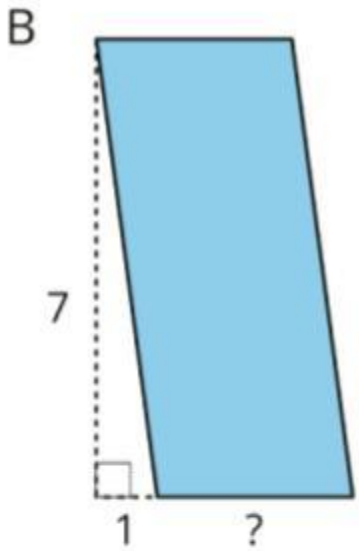
3. Here are the areas of three parallelograms. Use them to find the missing length (labeled with a "?") on each parallelogram.

A: 10 square units



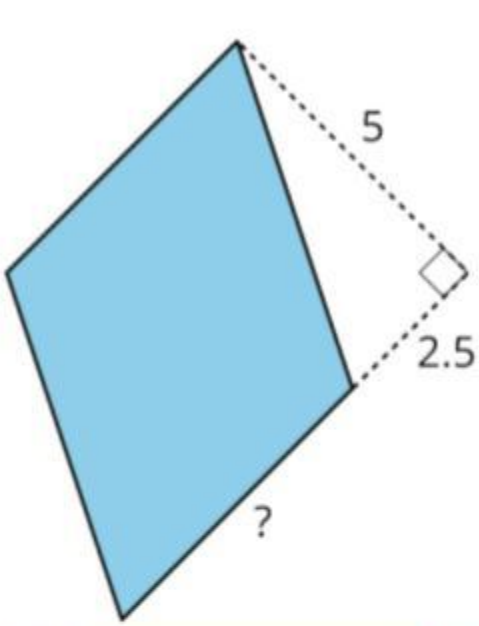
text

B: 21 square units



text

C: 25 square units



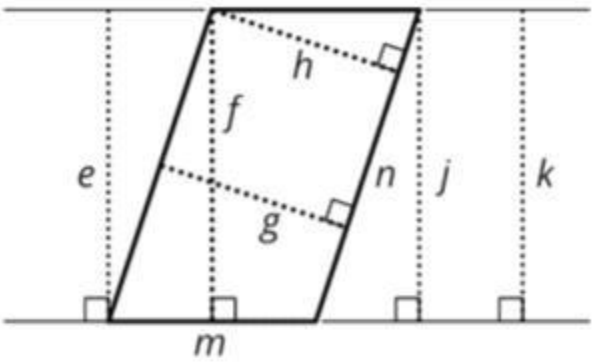
Text

4. The Dockland Building in Hamburg, Germany is shaped like a parallelogram.

If the length of the building is 86 meters and its height is 55 meters, what is the area of this face of the building?

Text

5. Select **all** segments that could represent a corresponding height if the side m is the base.



A. e

B. f

C. g

D. h

E. j

F. k

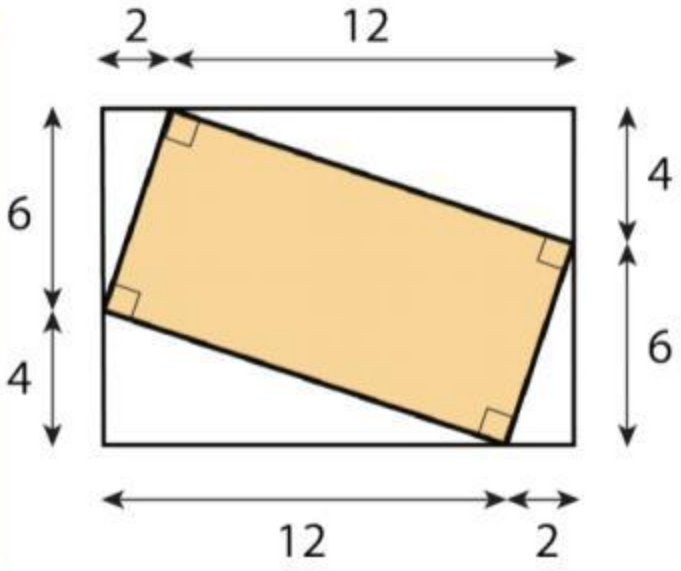
G. n

Circle the correct answers:

(From Unit 1, Lesson 5.)

6. Find the area of the shaded region. All measurements are in centimeters. Show your reasoning.

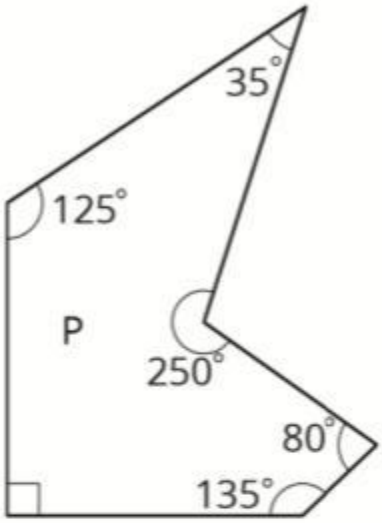
Answer:



(From Unit 1, Lesson 3.)

Unit 1 Lesson 4 Cumulative Practice Problems

1. Select **all** the statements that must be true for *any* scaled copy Q of Polygon P.



Use the circles to put around the correct choices.

A. The side lengths are all whole numbers.

B. The angle measures are all whole numbers.

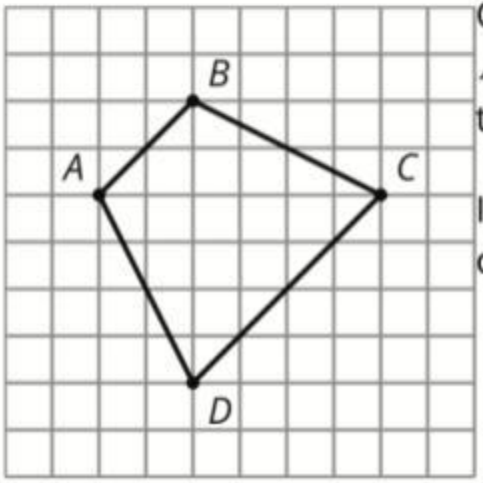
C. Q has exactly 1 right angle.

D. If the scale factor between P and Q is $\frac{1}{5}$, then each side length of P is multiplied by $\frac{1}{5}$ to get the corresponding side length of Q.

E. If the scale factor is 2, each angle in P is multiplied by 2 to get the corresponding angle in Q.

F. Q has 2 acute angles and 3 obtuse angles.

2. Here is Quadrilateral $ABCD$.

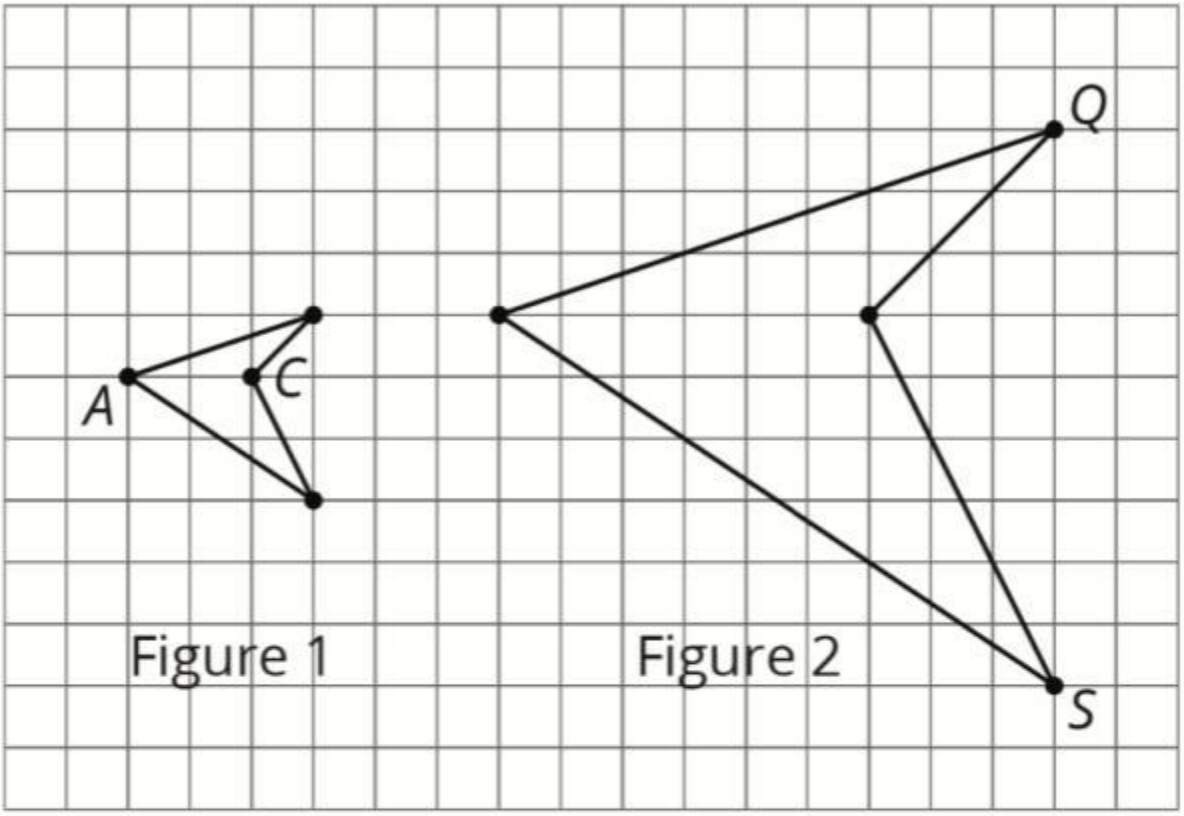


Quadrilateral $PQRS$ is a scaled copy of Quadrilateral $ABCD$. Point P corresponds to A, Q to B, R to C, and S to D.

If the distance from P to R is 3 units, what is the distance from Q to S? Explain your reasoning.

Answer here:

3. Figure 2 is a scaled copy of Figure 1.



a. Identify the points in Figure 2 that correspond to the points A and C in Figure 1. Label them P and R. What is the distance between P and R?

b. Identify the points in Figure 1 that correspond to the points Q and S in Figure 2. Label them B and D. What is the distance between B and D?

c. What is the scale factor that takes Figure 1 to Figure 2? **Answer here:**

d. G and H are two points on Figure 1, but they are not shown. The distance between G and H is 1. What is the distance between the corresponding points on Figure 2?

Answer here:

4. To make 1 batch of lavender paint, the ratio of cups of pink paint to cups of blue paint is 6 to 5. Find two more ratios of cups of pink paint to cups of blue paint that are equivalent to this ratio.

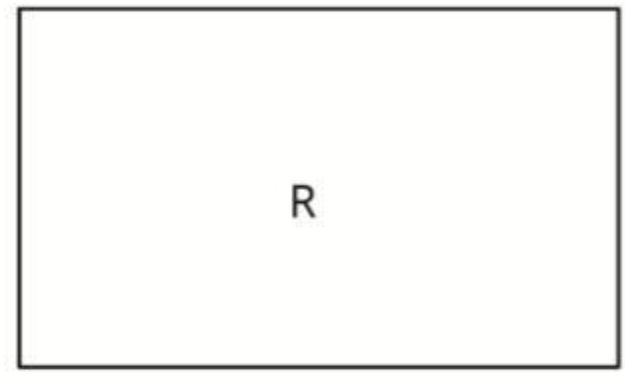
4. Answer here:

For number 3, place these letters in the correct location on the graph:

P **R** **B** **D**

Unit 1 Lesson 5 Cumulative Practice Problems

1. Rectangles P, Q, R, and S are scaled copies of one another. For each pair, decide if the scale factor from one to the other is greater than 1, equal to 1, or less than 1.



S

P

Q

>

<

=

a. from P to Q

b. from P to R

c. from Q to S

d. from Q to R

e. from S to P

f. from R to P

g. from P to S

USe the >, < or = sign for each.

2. Triangle S and Triangle L are scaled copies of one another.

a. What is the scale factor from S to L?

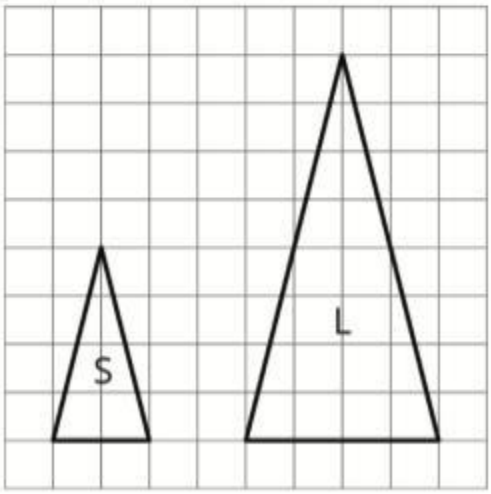
text

b. What is the scale factor from L to S?

text

c. Triangle M is also a scaled copy of S. The scale factor from S to M is $\frac{3}{2}$. What is the scale factor from M to S?

text



3. Are two squares with the same side lengths scaled copies of one another? Explain your reasoning.

Answer here:

4. Quadrilateral A has side lengths 2, 3, 5, and 6. Quadrilateral B has side lengths 4, 5, 8, and 10. Could one of the quadrilaterals be a scaled copy of the other? Explain.

Answer here:

(From Unit 1, Lesson 2.)

5. Select **all** the ratios that are equivalent to the ratio $12 : 3$.

A. $6 : 1$

B. $1 : 4$

C. $4 : 1$

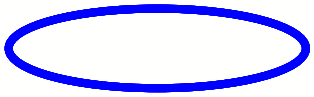
D. $24 : 6$

E. $15 : 6$

F. $1{,}200 : 300$

G. $112 : 13$

Drag the circles to the true statements.

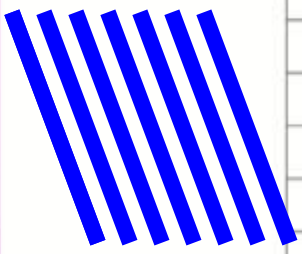


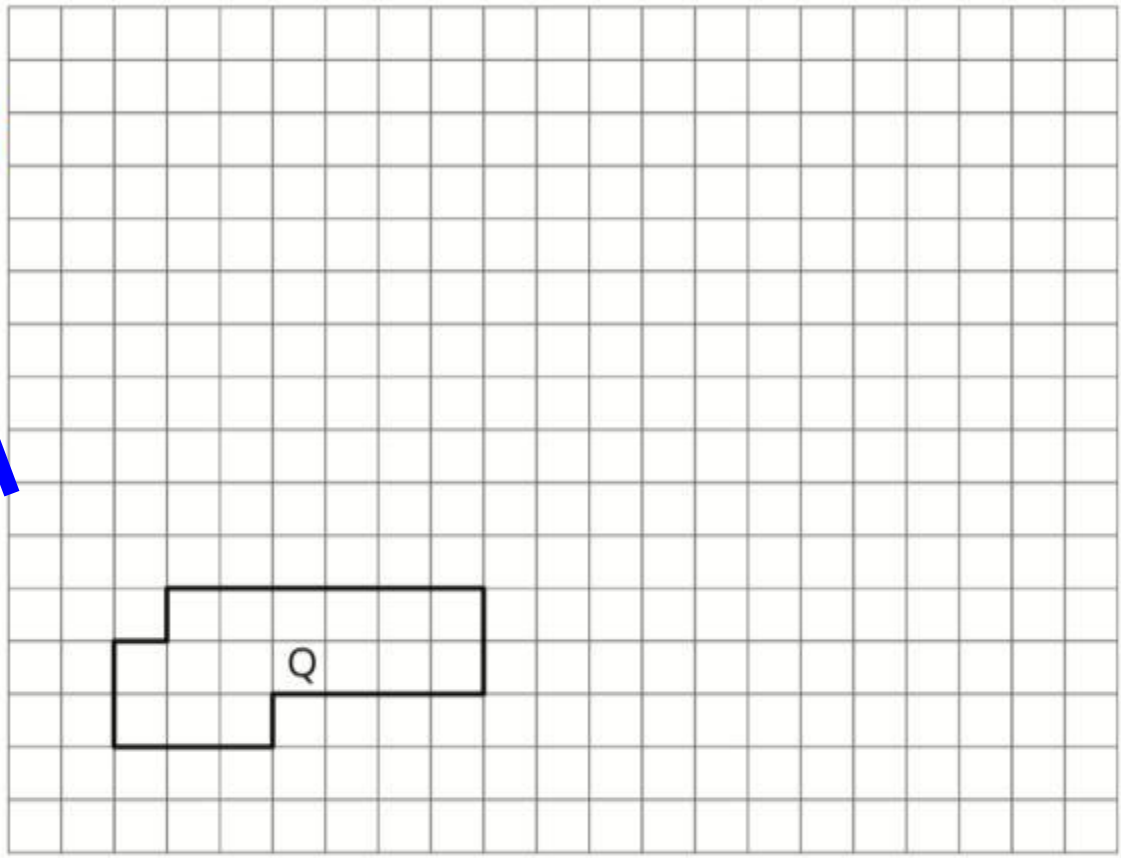
Next Lesson, Lesson 6 is optional! Skip if you want!

Unit 1 Lesson 6 Cumulative Practice Problems

1. On the grid, draw a scaled copy of Polygon Q using a scale factor of 2. Compare the perimeter and area of the new polygon to those of Q.

Use the lines below to draw and adjust the copy.





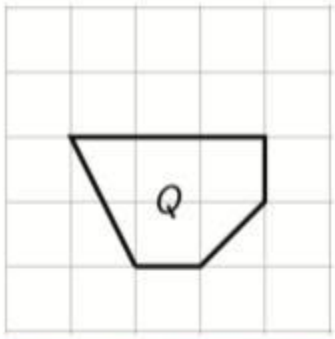
2. A right triangle has an area of 36 square units.

If you draw scaled copies of this triangle using the scale factors in the table, what will the areas of these scaled copies be? Explain or show your reasoning.

Answer here:

scale factor	area (units^2)
1	36
2	text
3	Text
5	text
$\frac{1}{2}$	text
$\frac{2}{3}$	Text

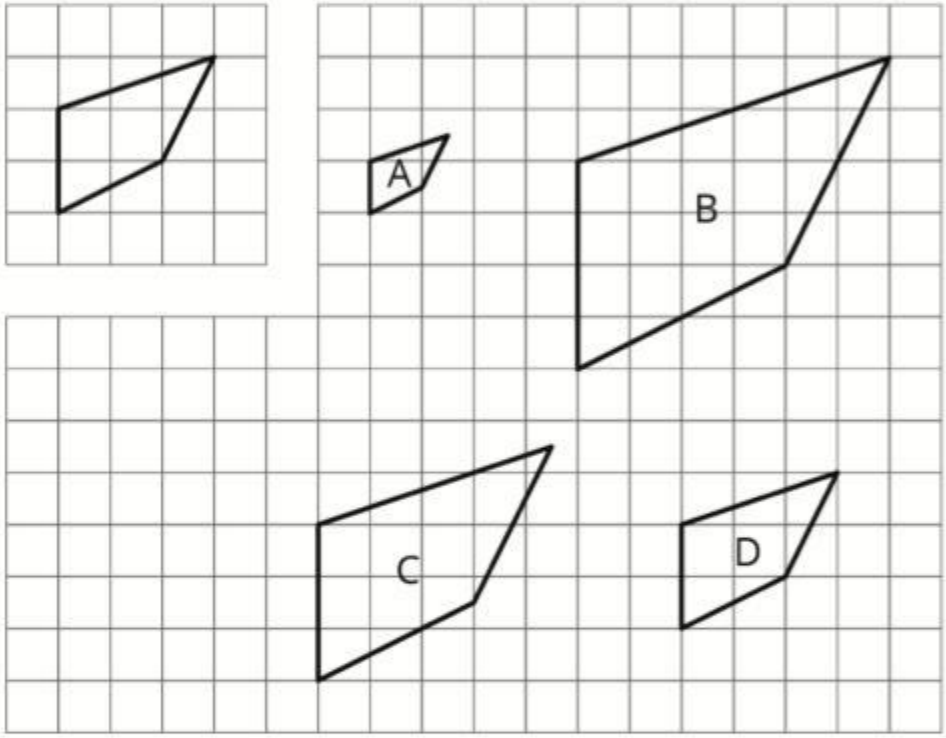
3. Diego drew a scaled version of a Polygon P and labeled it Q.



If the area of Polygon P is 72 square units, what scale factor did Diego use to go from P to Q? Explain your reasoning.

Answer here:

4. Here is an unlabeled polygon, along with its scaled copies Polygons A–D. For each copy, determine the scale factor. Explain how you know.



A.

B.

C.

D.

(From Unit 1, Lesson 2.)

5. Solve each equation mentally.

a. $\frac{1}{7} \cdot x = 1$

b. $x \cdot \frac{1}{11} = 1$

c. $1 \div \frac{1}{5} = x$

(From Unit 1, Lesson 5.)

A.

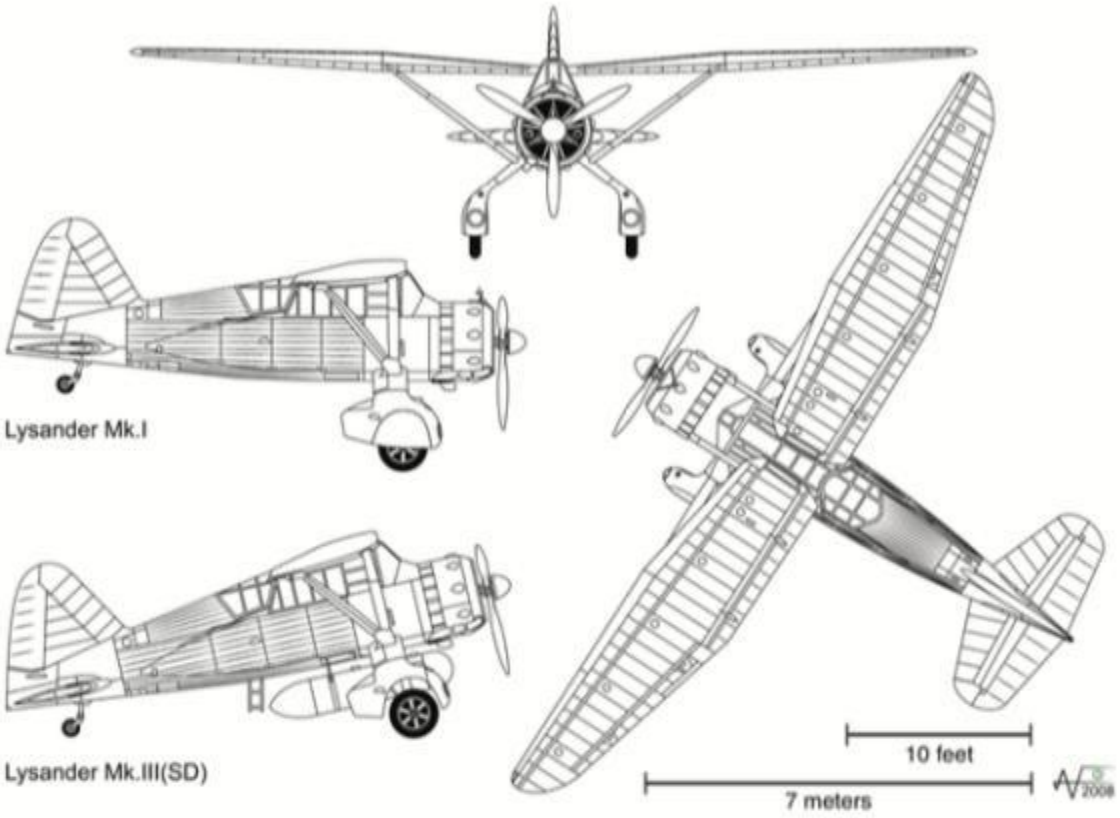
B.

C.

Pick one of the equation in number 5 and explain in words how you solved mentally.

Unit 1 Lesson 7 Cumulative Practice Problems

1. The Westland Lysander was an aircraft used by the Royal Air Force in the 1930s. Here are some scale drawings that show the top, side, and front views of the Lysander.



Use the scales and scale drawings to approximate the actual lengths of:

a. the wingspan of the plane, to the nearest foot

answer:

b. the height of the plane, to the nearest foot

answer:

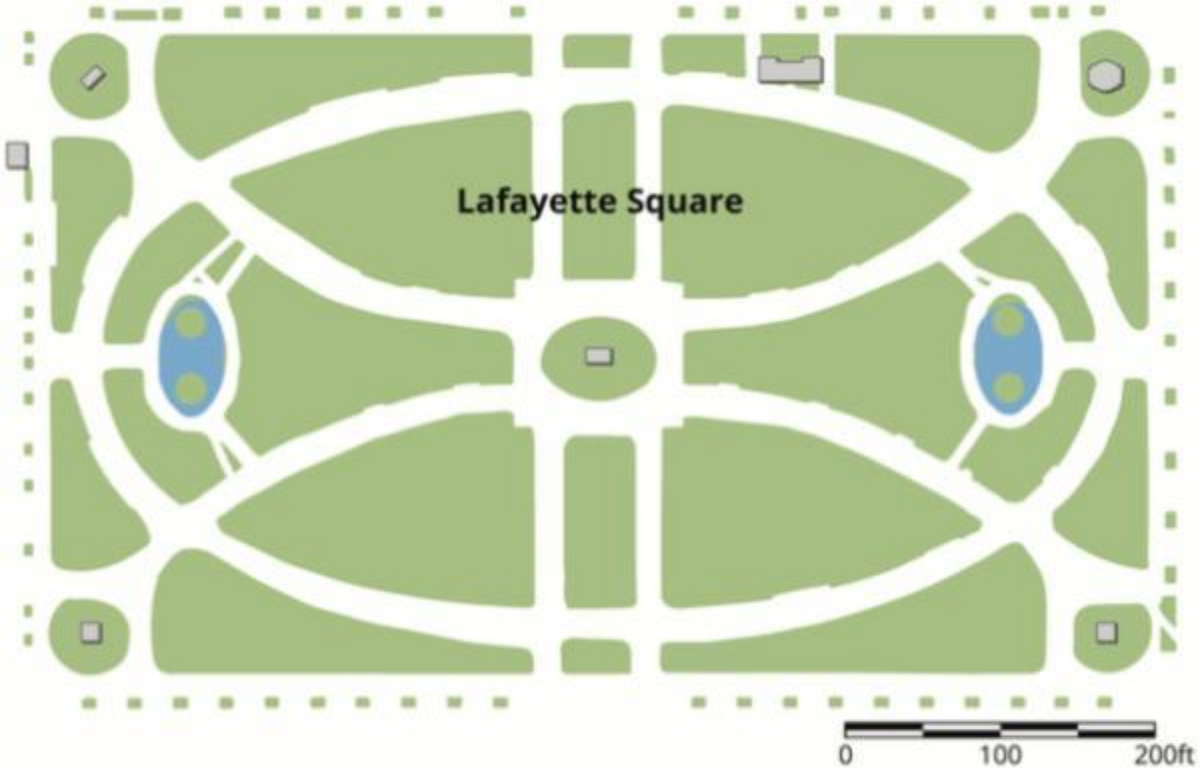
c. the length of the Lysander Mk. I, to the nearest meter

Answer:

2. A blueprint for a building includes a rectangular room that measures 3 inches long and 5.5 inches wide. The scale for the blueprint says that 1 inch on the blueprint is equivalent to 10 feet in the actual building. What are the dimensions of this rectangular room in the actual building?

Answer and explain how you got your answer:

3. Here is a scale map of Lafayette Square, a rectangular garden north of the White House.



a. The scale is shown in the lower right corner. Find the actual side lengths of Lafayette Square in feet. Answer:

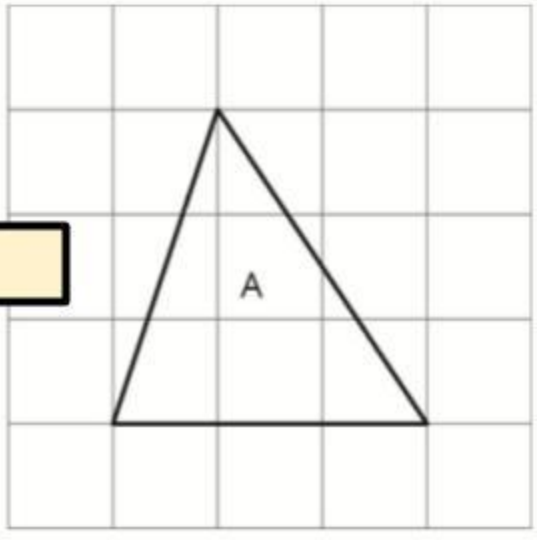
b. Use an inch ruler to measure the line segment of the graphic scale. About how many feet does one inch represent on this map? Answer:

4. Here is Triangle A. Lin created a scaled copy of Triangle A with an area of 72 square units.

a. How many times larger is the area of of the scaled copy compared to that of Triangle A? answer:

b. What scale factor did Lin apply to the Triangle A to create the copy?

c. What is the length of bottom side of the scaled copy? Answer:

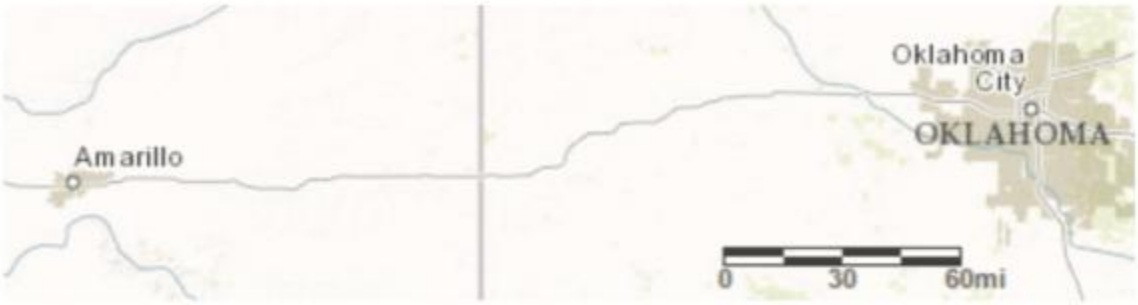


(From Unit 1, Lesson 6.)

LESSON 8 SKIP!

Unit 1 Lesson 8 Cumulative Practice Problems

1. Here is a map that shows parts of Texas and Oklahoma.



a. About how far is it from Amarillo to Oklahoma City? Explain your reasoning.

b. Driving at a constant speed of 70 miles per hour, will it be possible to make this trip in 3 hours? Explain how you know.

2. A local park is in the shape of a square. A map of the local park is made with the scale 1 inch to 200 feet.

a. If the park is shown as a square on the map, each side of which is one foot long, how long is each side of the square park?

b. If a straight path in the park is 900 feet long, how long would the path be when represented on the map?

Unit 1 Lesson 9 Cumulative Practice Problems

1. An image of a book shown on a website is 1.5 inches wide and 3 inches tall on a computer monitor. The actual book is 9 inches wide.

   a. What scale is being used for the image?

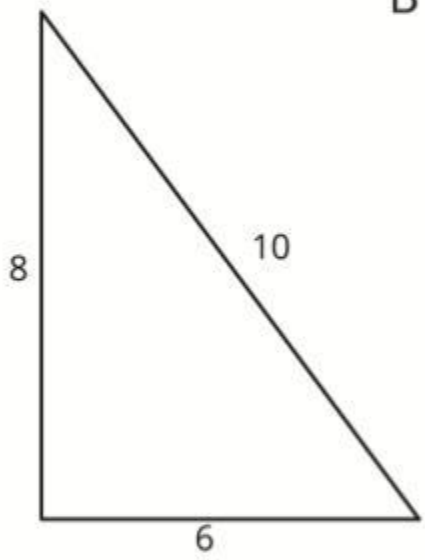
   Answer: Explain your work:

   b. How tall is the actual book?

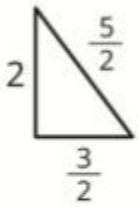
   Answer: Explain your work:

3. These triangles are scaled copies of each other.

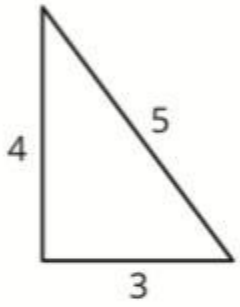
F



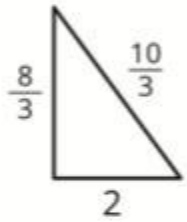
B



G



H



For each pair of triangles listed, the area of the second triangle is how many times larger than the area of the first?

a. Triangle G and Triangle F

b. Triangle G and Triangle B

c. Triangle B and Triangle F

d. Triangle F and Triangle H

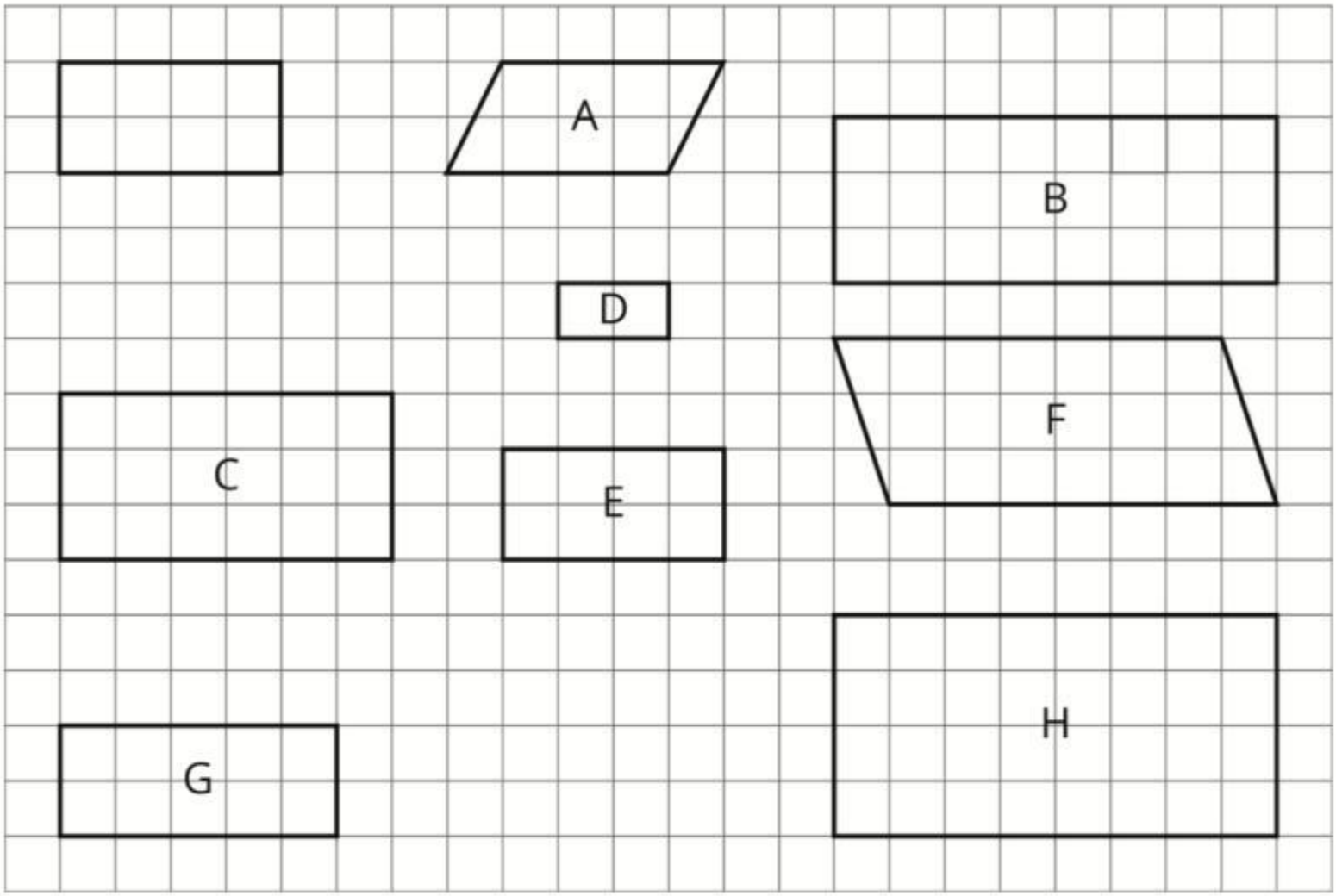
e. Triangle G and Triangle H

f. Triangle H and Triangle B

A.	Text
B.	Text
C.	Text
D.	Text
E.	Text
F.	Text

(From Unit 1, Lesson 6.)

4. Here is an unlabeled rectangle, followed by other quadrilaterals that are labeled.



a. Select **all** quadrilaterals that are scaled copies of the unlabeled rectangle. Explain how you know.

Answer:

b. On graph paper, draw a different scaled version of the original rectangle.

(From Unit 1, Lesson 3.)

Use another sheet of graph paper! Take a picture of it or scan me your answer.

2. The flag of Colombia is a rectangle that is 6 ft long with three horizontal strips.

- The top stripe is 2 ft tall and is yellow.
- The middle stripe is 1 ft tall and is blue.
- The bottom stripe is also 1 ft tall and is red.

a. Create a scale drawing of the Colombian flag with a scale of 1 cm to 2 ft.

b. Create a scale drawing of the Colombian flag with a scale of 2 cm to 1 ft.

Use separate graph paper to answer these 2 questions. Take a picture of your answer or scan and submit work to me.

Unit 1 Lesson 10 Cumulative Practice Problems

1. Here is a scale drawing of a swimming pool where 1 cm represents 1 m.

a. How long and how wide is the actual swimming pool?

Answer:

b. Will a scale drawing where 1 cm represents 2 m be larger or smaller than this drawing?

Answer:

c. Make a scale drawing of the swimming pool where 1 cm represents 2 m.

Submit this answer on graph paper or another piece of paper. Can be scanned or take a picture and send it.

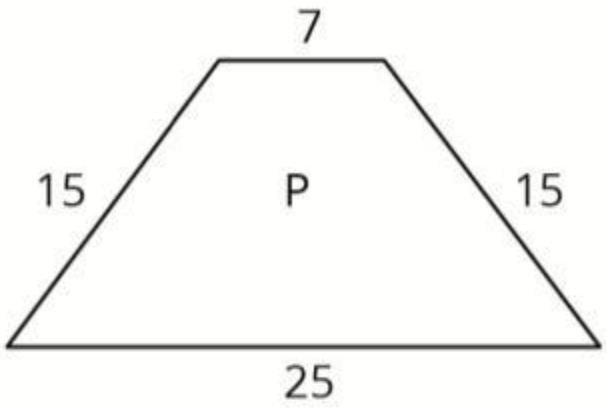
2. A map of a park has a scale of 1 inch to 1,000 feet. Another map of the same park has a scale of 1 inch to 500 feet. Which map is larger? Explain or show your reasoning.

Answer here:

3. On a map with a scale of 1 inch to 12 feet, the area of a restaurant is 60 in^2. Han says that the actual area of the restaurant is 720 ft^2. Do you agree or disagree? Explain your reasoning.

Answer here:

4. If Quadrilateral Q is a scaled copy of Quadrilateral P created with a scale factor of 3, what is the perimeter of Q?

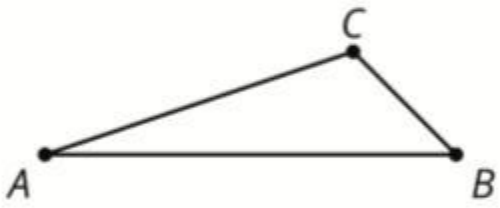


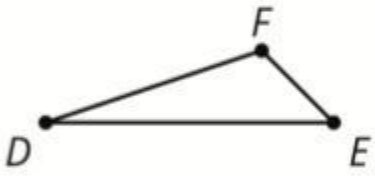
(From Unit 1, Lesson 3.)

Answer here:

5. Triangle DEF is a scaled copy of triangle ABC. For each of the following parts of triangle ABC, identify the corresponding part of triangle DEF.

- angle ABC
- angle BCA
- segment AC
- segment BA





(From Unit 1, Lesson 2.)

Use these lines to identify angle ABC:

Use these lines to identify angle BCA.

Use this line to identify segment AC

Use this line to identify segment BA.

Unit 1 Lesson 11 Cumulative Practice Problems

1. A scale drawing of a car is presented in the following three scales. Order the scale drawings from smallest to largest. Explain your reasoning. (There are about 1.1 yards in a meter, and 2.54 cm in an inch.)

   a. 1 in to 1 ft

   b. 1 in to 1 m

   c. 1 in to 1 yd

Answer here:

2. Which scales are equivalent to 1 inch to 1 foot? Select **all** that apply.

   A. 1 to 12

   B. $\frac{1}{12}$ to 1

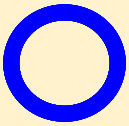
   C. 100 to 0.12

   D. 5 to 60

   E. 36 to 3

   F. 9 to 108

Move the circles to the correct answers:



3. A model airplane is built at a scale of 1 to 72. If the model plane is 8 inches long, how many feet long is the actual airplane?

Answer and explain how you got your answer:

4. Quadrilateral A has side lengths 3, 6, 6, and 9. Quadrilateral B is a scaled copy of A with a shortest side length equal to 2. Jada says, "Since the side lengths go down by 1 in this scaling, the perimeter goes down by 4 in total." Do you agree with Jada? Explain your reasoning.

ANSWER HERE:

(From Unit 1, Lesson 3.)

5. Polygon B is a scaled copy of Polygon A using a scale factor of 5. Polygon A's area is what fraction of Polygon B's area?

ANSWER HERE AND EXPLAIN HOW YOU GOT YOUR ANSWER:

(From Unit 1, Lesson 6.)

6. Figures R, S, and T are all scaled copies of one another. Figure S is a scaled copy of R using a scale factor of 3. Figure T is a scaled copy of S using a scale factor of 2. Find the scale factors for each of the following:

a. From T to S — SCALE:

b. From S to R — SCALE:

c. From R to T — SCALE:

d. From T to R — SCALE:

HINT: YOU MAY NEED TO DRAW PICTURES OF THEM TO VISUALLY SEE!

(From Unit 1, Lesson 5.)

Unit 1 Lesson 12 Cumulative Practice Problems

1. The Empire State Building in New York City is about 1,450 feet high (including the antenna at the top) and 400 feet wide. Andre wants to make a scale drawing of the front view of the Empire State Building on an $8\frac{1}{2}$-inch-by-11-inch piece of paper. Select a scale that you think is the most appropriate for the scale drawing. Explain your reasoning.

   a. 1 inch to 1 foot

   b. 1 inch to 100 feet

   c. 1 inch to 1 mile

   d. 1 centimeter to 1 meter

   e. 1 centimeter to 50 meters

   f. 1 centimeter to 1 kilometer

USE THIS CIRCLE TO IDENTIFY YOUR CHOICE AND EXPLAIN BELOW:

2. Elena finds that the area of a house on a scale drawing is 25 square inches. The actual area of the house is 2,025 square feet. What is the scale of the drawing?

ANSWER AND EXPLAIN HOW YOU GOT YOUR ANSWER:

3. Which of these scales are equivalent to 3 cm to 4 km? Select **all** that apply. Recall that 1 inch is 2.54 centimeters.

A. 0.75 cm to 1 km

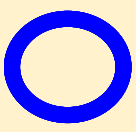
B. 1 cm to 12 km

C. 6 mm to 2 km

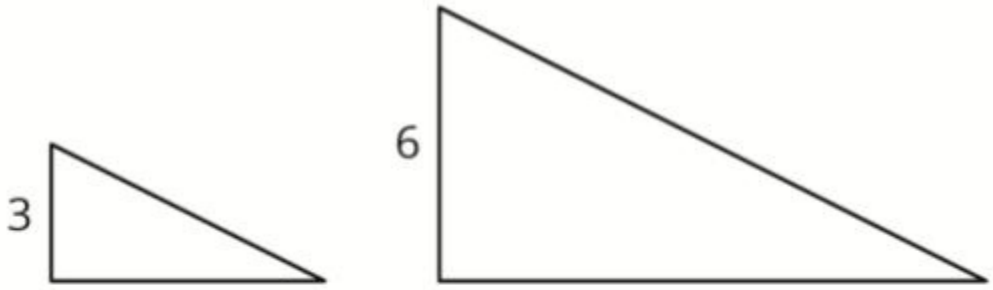
D. 0.3 mm to 40 m

E. 1 inch to 7.62 km

USE THE CIRCLES TO IDENTIFY YOUR CHOICES:



4. These two triangles are scaled copies of one another. The area of the smaller triangle is 9 square units. What is the area of the larger triangle? Explain or show how you know.



Answer here and do not forget to explain:

5. Water costs $1.25 per bottle. At this rate, what is the cost of:

a. 10 bottles?

b. 20 bottles?

c. 50 bottles?

6. The first row of the table shows the amount of dish detergent and water needed to make a soap solution.

a. Complete the table for 2, 3, and 4 batches.

b. How much water and detergent is needed for 8 batches? Explain your reasoning.

Answer "B" here:

number of batches	cups of water	cups of detergent
1	6	1
2		
3		
4