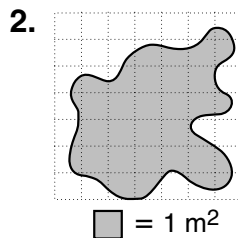
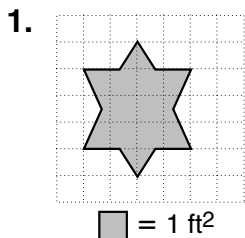
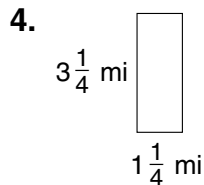
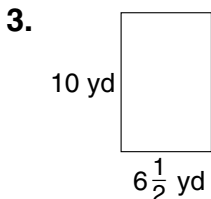


LESSON **Practice C**
10-2 *Estimating and Finding Area*

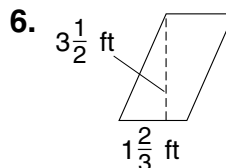
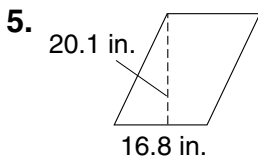
Estimate the area of each figure.



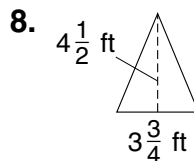
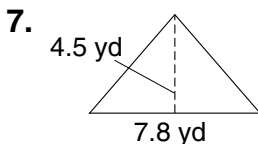
Find the area of each rectangle.



Find the area of each parallelogram.



Find the area of each triangle.

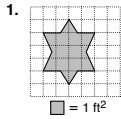


9. A kite is formed by two congruent triangles with 4.5-cm bases and heights of 7.9-cm. What is the area of the entire kite?
- _____

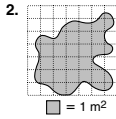
LESSON Practice C

10-2 Estimating and Finding Area

Estimate the area of each figure.

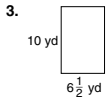


about 11 square feet

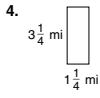


about 25 square meters

Find the area of each rectangle.

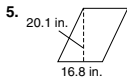


65 yd²

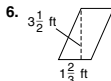


4 1/16 mi²

Find the area of each parallelogram.

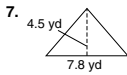


337.68 in²

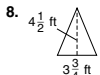


5 5/6 ft²

Find the area of each triangle.



17.55 yd²



8 7/16 ft²

9. A kite is formed by two congruent triangles with 4.5-cm bases and heights of 7.9-cm. What is the area of the entire kite?

35.55 cm²

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LESSON Reteach

10-2 Estimating and Finding Area

You can use grid paper to estimate and find area of figures. The area of a figure is the amount of surface it covers. Area is measured in square units.

To estimate the area of the figure below, first find the number of fully shaded squares. Next, find the number of nearly full squares. Then, find the number of half or nearly half-shaded squares.

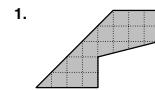


There are 6 fully shaded squares.
There are 2 nearly full squares.
There are 8 half-shaded squares.
($8 \cdot \frac{1}{2} = 4$)

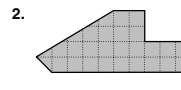
Find the estimated total number of squares shaded.

$6 + 2 + 4 = 12$. The area of the figure is about 12 square units.

Estimate the area of each figure. Possible answers:



18 units



27 units

To find the area of a rectangle, find the total number of square units.

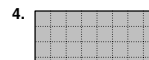


There are 3 rows of 5 squares.
 $3 \cdot 5 = 15$
So, the area of the rectangle is 15 square units.

Find the area of each rectangle.



12 square units



32 square units

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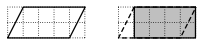
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Holt Middle School Math Course 1

LESSON Reteach

10-2 Estimating and Finding Area (continued)

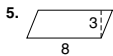
To find the area of a parallelogram, first turn your parallelogram into a rectangle.



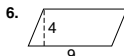
Then find the area of the rectangle.
Because the area of a rectangle is $A = \ell w$, the area of a parallelogram is $A = bh$.

$4 \cdot 2 = 8$
So, the area of the parallelogram is 8 square units.

Find the area of each parallelogram.

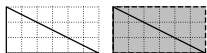


24 square units



36 square units

To find the area of a triangle, first turn your triangle into a rectangle or parallelogram.



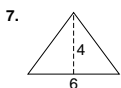
Next, find the area of the rectangle.

$6 \cdot 3 = 18$

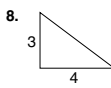
The triangle is half the area of the formed rectangle or $A = \frac{1}{2}bh$, so divide the product by 2.

$18 \div 2 = 9$ So, the area of the triangle is 9 square units.

Find the area of each triangle.



12 square units



6 square units

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LESSON Challenge

10-2 Chewing Gum Archaeology

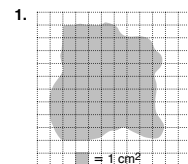
Archaeologists found the oldest piece of chewing gum in Sweden—it was 9,000 years old! The scientists studied the gum to learn about the people who may have made and chewed it. You can be a chewing gum archaeologist, too. How? When a standard-sized wad of chewed gum is stepped on, you can study the area of the flattened gum to find the weight of the person who squished it!

Estimate the area covered by each flattened piece of gum below. Then use the table to find the gum squisher's weight. Possible answers:



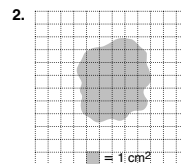
Bubble gum was invented in Pennsylvania in 1928.

Estimated Area of Squished Gum	Estimated Weight of Gum Squisher
about 25 cm ²	about 50 lb
about 50 cm ²	about 100 lb
about 75 cm ²	about 150 lb
about 100 cm ²	about 200 lb



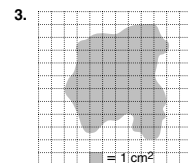
Estimated Area: about 65 cm²

Estimated Weight: about 150 lb



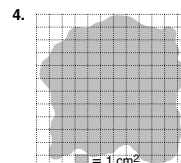
Estimated Area: about 27 cm²

Estimated Weight: about 50 lb



Estimated Area: about 59 cm²

Estimated Weight: about 100 lb



Estimated Area: about 105 cm²

Estimated Weight: about 200 lb

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