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Online Practice and Help
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YOUR TURN

4. A parallelogram-shaped field in a park needs sod. The parallelogram has a base of 21.5 meters and a height of 18 meters. The sod is sold in pallets of 50 square meters. How many pallets of sod are needed to fill the field?

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Guided Practice

HW # 53 1-11

1. A triangular bandana has an area of 70 square inches. The height of the triangle is $8\frac{3}{4}$ inches. Write and solve an equation to find the length of the base of the triangle. (*Example 1*)

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2. The top of a desk is shaped like a trapezoid. The bases of the trapezoid are 26.5 and 30 centimeters long. The area of the desk is 791 square centimeters. The height of the trapezoid is the width of the desk. Write and solve an equation to find the width of the desk. (*Example 2*)

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3. Taylor wants to paint his rectangular deck that is 42 feet long and 28 feet wide. A gallon of paint covers about 350 square feet. How many gallons of paint will Taylor need to cover the entire deck? (*Example 3*)

Write and solve an equation to find the _____ of the deck.

_____

Write and solve an equation to find the number of _____.

_____

Taylor will need _____ gallons of paint.

ESSENTIAL QUESTION

4. How do you use equations to solve problems about area of rectangles, parallelograms, trapezoids, and triangles?

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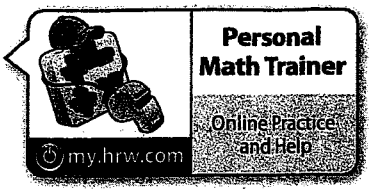
Name _____ Class _____ Date _____

13.3 Independent Practice

CA CC 6.G.1, 6.EE.7



5. A window shaped like a parallelogram has an area of $18\frac{1}{3}$ square feet. The height of the window is $3\frac{1}{3}$ feet. How long is the base of the window?

6. A triangular sail has a base length of 2.5 meters. The area of the sail is 3.75 square meters. How tall is the sail?

7. A section in a stained glass window is shaped like a trapezoid. The top base is 4 centimeters and the bottom base is 2.5 centimeters long. If the area of the section of glass is 3.9 square centimeters, how tall is the section?

8. **Multistep** Amelia wants to paint three walls in her family room. Two walls are 26 feet long by 9 feet wide. The other wall is 18 feet long by 9 feet wide.

a. What is the total area of the walls that Amelia wants to paint?

b. Each gallon of paint covers about 250 square feet. How many gallons of paint should Amelia buy to paint the walls?

9. **Critical Thinking** The area of a triangular block is 64 square inches. If the base of the triangle is twice the height, how long are the base and the height of the triangle?

10. **Multistep** Alex needs to varnish the top and the bottom of a dozen rectangular boards. The boards are 8 feet long and 3 feet wide. Each pint of varnish covers 125 square feet and costs $3.50.

a. What is the total area that Alex needs to varnish?

b. How much will it cost Alex to varnish all the boards?

11. **Multistep** Leia cuts congruent triangular patches with an area of 45 square centimeters from a rectangular piece of fabric that is 18 centimeters long and 10 centimeters wide. How many of the patches can Leia cut from 32 pieces of the fabric?

12. **Multistep** A farmer needs to buy fertilizer for two fields. One field is shaped like a trapezoid, and the other is shaped like a triangle. The trapezoidal field has bases that are 35 and 48 yards and a height of 26 yards. The triangular field has the same height as the trapezoidal field and a base of 39 yards. Each bag of fertilizer covers 150 square yards. How many bags of fertilizer does the farmer need to buy?