

Assignment

LESSON 3: All About That Base . . . and Height

Write

Define each term in your own words.

1. height of a parallelogram
2. height of a triangle

Remember

To determine the area of a parallelogram, triangle, or trapezoid, compose or decompose it into one or more figures.

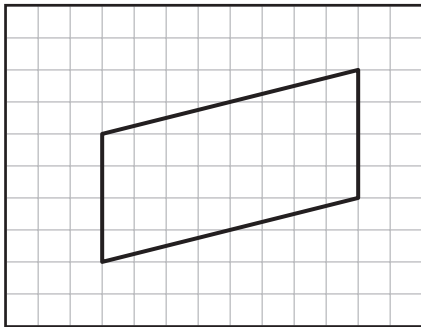
Area of a parallelogram = bh

Area of a triangle = $\frac{1}{2}bh$

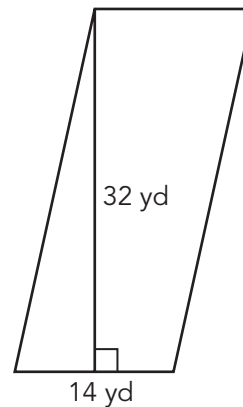
Area of a trapezoid = $\frac{1}{2}(b_1 + b_2)h$

Practice

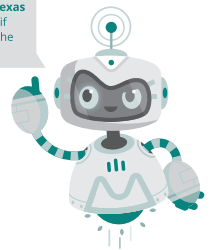
1. Identify a base and corresponding height for the given parallelogram. Then determine its area.



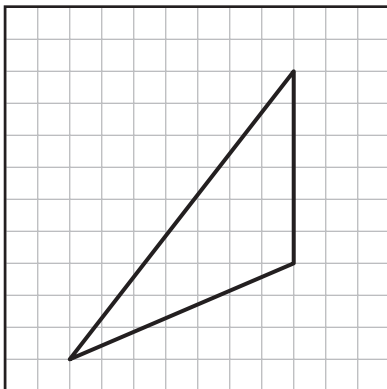
2. Calculate the area of the parallelogram.



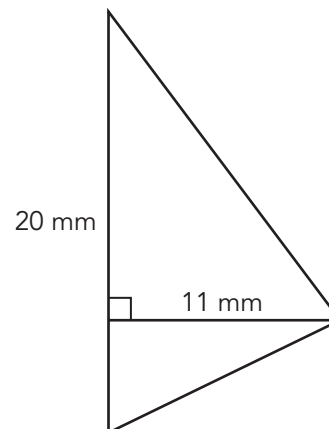
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you need a hint on the
Practice questions.



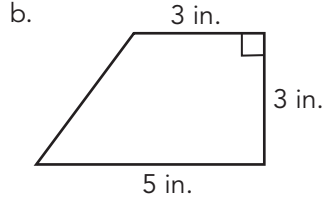
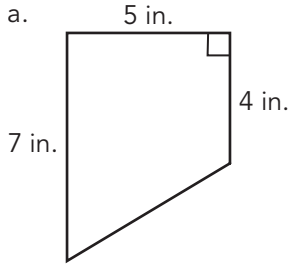
3. Identify a base and corresponding height for the given triangle. Then determine its area.



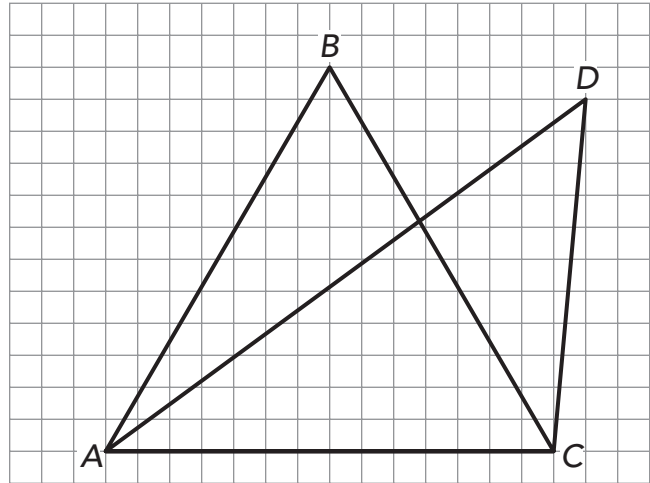
4. Calculate the area of the triangle.



5. Yvonne cut pictures in the shapes shown to place into her scrapbook. What is the area of each picture?

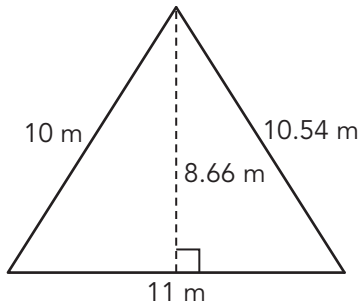


6. Without performing any calculations, determine which triangle has the greater area. Write a sentence to explain your reasoning.



Stretch

- What is the area of a parallelogram that has a base of $4\frac{3}{4}$ ft and a height of $1\frac{1}{3}$ ft?
- Calculate the area of the triangle.



Review

Use the Distributive Property to write an equivalent addition expression for each.

- $6(9 + 1)$
- $(14 + 3)7$
- $\frac{1}{2}(7 + 10)$

Decompose each rectangle into two or three smaller rectangles to demonstrate the Distributive Property. Then write each in the form $a(b + c) = ab + ac$.

