

Math 6 Practice Test: Geometry 2D Figures

Name _____
Date _____

1) Define the terms below and give an example of each.

- a. Area

- b. Composite figure

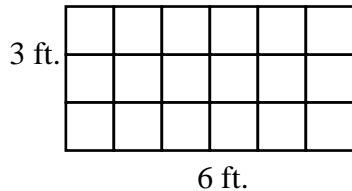
- c. Obtuse triangle

- d. Polygon

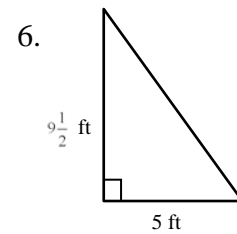
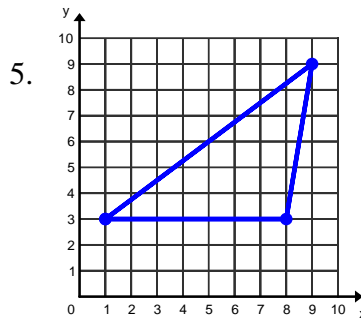
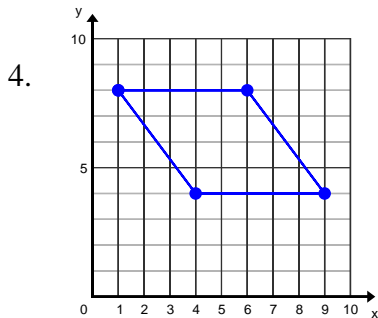
2) For which plane figures does the formula $A=bh$ work? Circle all that apply.

- | | | |
|-----------|---------------|----------|
| trapezoid | rectangle | triangle |
| square | parallelogram | rhombus |

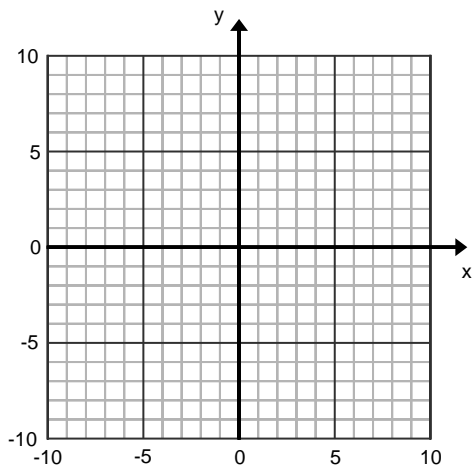
3) Show **two different** ways to find the area of the figure below. Explain your methods.



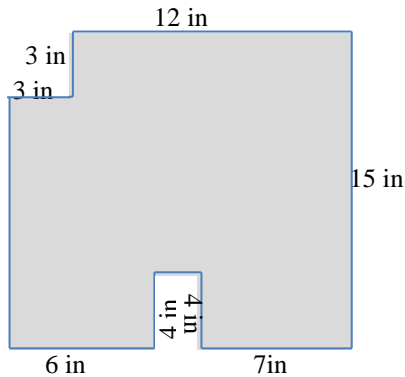
#4 - 6) Find the area of each figure below.



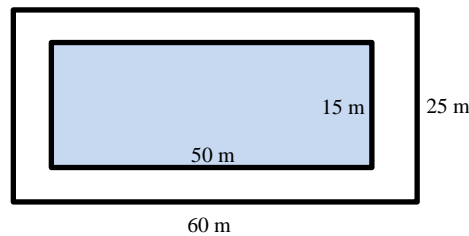
- 7) The area of a triangle is 54 square meters. If the height is 9 meters, find the length of the base. Show your work.
- 8) A square has a perimeter of 48 inches. What is the area of the square? Show your work.
- 9) Find the area of an isosceles trapezoid with height of 5 cm and bases of 4 cm and 7 cm. Show your work.
- 10) Plot the given points and connect them as you go. Identify the specific shape. Then compute the area of the figure. $((-5, -6), (7, -6), (7, 5), (1, 5), (-5, -6))$
Show your work.



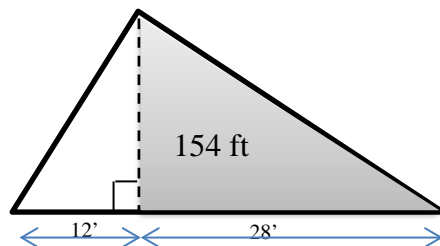
- 11) Show or explain **2 different ways** to find the area of the composite figure below. Then find the area. Note: All angles are right angles.



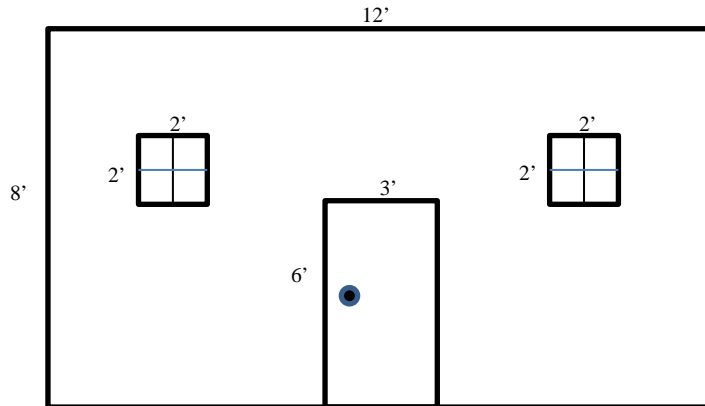
- 12) A large pool at a resort is surrounded by a deck as shown below in the diagram. The resort wants to coat the deck with a non-slip material. The resort must know the area of the deck to determine how much non-slip material must be ordered. Find the area of the deck around the pool. Show your work.



- 13) A large triangle is composed of two smaller triangles – one white and one gray. The gray triangle has an area 154 ft^2 . Find the area of the smaller white triangle.



- 14) Mary wants to paint one wall in her entryway with an accent color. The diagram below gives the dimensions. The windows and door will NOT be painted.



- a. Calculate the area of the wall that will be painted.
- b. If each can of paint she can buy covers 35 ft^2 , how many cans of paint must she purchase for the painting job?

Long-term Memory Review

15) Solve. $3x = 1.32$

- 16) There are 108 eggs to be packed into egg containers. If the egg containers hold one and a half dozen eggs, how many containers will be needed?

17) Find the value of p in the proportion. $\frac{p}{9} = \frac{30}{54}$

18) Draw a model to solve. $1\frac{3}{4} \div \frac{1}{2} =$