

Grade 6 · Area of Triangles, Quadrilaterals and Polygons · Worksheet

Common Core 6.G.A.1 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

This worksheet gives Grade 6 students ten problems on finding the area of right triangles, other triangles, parallelograms, trapezoids, and composite polygons. The problems start with direct use of a formula and move toward missing measurements and shapes cut into pieces.

The last three problems are word problems with dollars, paint, and pavers. Every problem practices Common Core standard 6.G.A.1. Show each formula, write the units, and check that every height is perpendicular to its base.

Grade 6 Common Core: 6.G.A.1

Problem 1: Right triangle

Find the area of a right triangle whose legs measure 9 ft and 4 ft.

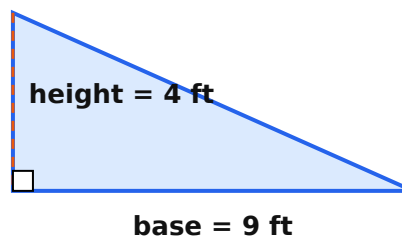


Figure for Problem 1.

Problem 2: Triangle area

Find the area of a triangle with base 14 m and height 6 m.

Problem 3: Parallelogram area

Find the area of a parallelogram with base 12 in and height 7 in.

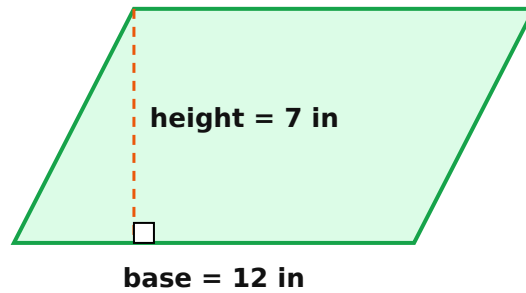


Figure for Problem 3.

Problem 4: Missing height

A triangle has an area of 45 yd^2 and a base of 10 yd . Find its height.

Problem 5: Trapezoid area

Find the area of the trapezoid. Its parallel sides are 6 ft and 10 ft , and its height is 4 ft .

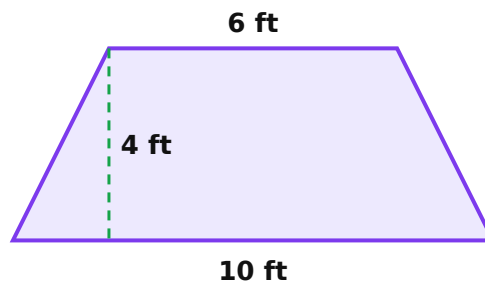


Figure for Problem 5.

Problem 6: Missing base

A parallelogram has an area of 72 cm^2 and a height of 9 cm . Find its base.

Problem 7: Rectangle plus triangle

Find the area of the polygon. A rectangle 10 ft wide and 6 ft tall has a triangle on top with base 10 ft and height 4 ft .

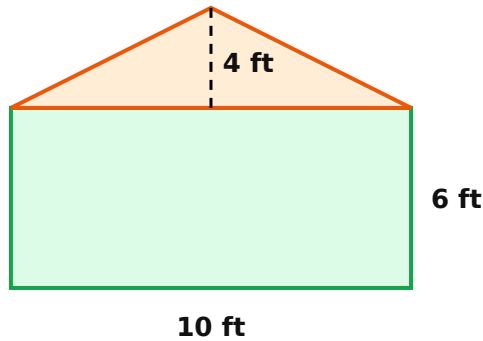


Figure for Problem 7.

Problem 8: Garden beds

Sofia's garden bed is a trapezoid. The parallel sides are 9 m and 15 m, and they are 8 m apart. One bag of soil covers 12 m^2 . How many bags does she need?

Problem 9: Painting a gable wall

A garage wall is a rectangle 16 ft wide and 8 ft tall, with a triangular peak above it. The peak has a base of 16 ft and a height of 5 ft. One gallon of paint covers 84 ft^2 and costs \$32. Find the total area of the wall and the cost of the paint for one coat.

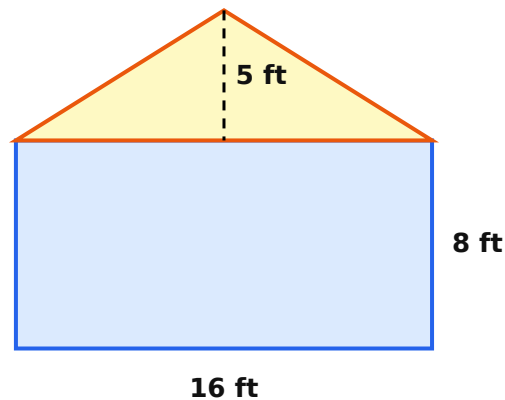


Figure for Problem 9.

Problem 10: Patio pavers

Jamal is paving an L-shaped patio. Before the corner is removed it is a 14 ft by 10 ft rectangle. A 6 ft by 4 ft rectangle is cut out of one corner. Pavers cost \$3.50 per square foot. Find the area of the patio and the cost of the pavers.

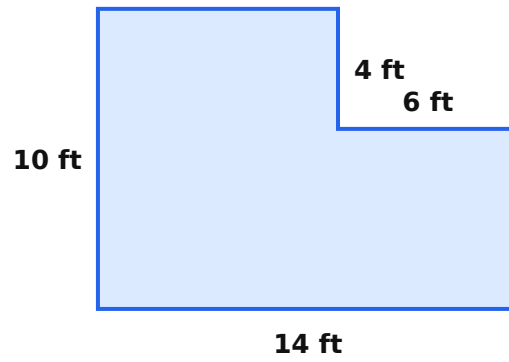


Figure for Problem 10.