Finding the Area of Quadrilaterals

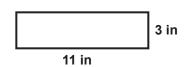
G-AREA 1

Instructions: Find the area of each square or rectangle using the formula: $A = L \times W$.

1

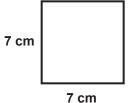
$$A = 5 \times 8 = 40 \text{ m}^2$$

2



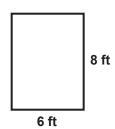
$$A = 3 \times 11 = 33 \text{ in}^2$$

3



$$A = 7 \times 7 = 49 \text{ cm}^2$$

4

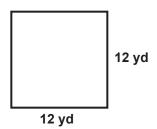


$$A = 8 \times 6 = 48 \text{ ft}^2$$



$$A = 4 \times 20 = 80 \text{ km}^2$$

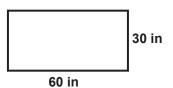
6



$$A = 12 \times 12 = 144 \text{ yd}^2$$

7

$$A = 5 \times 7 = 35 \text{ m}^2$$

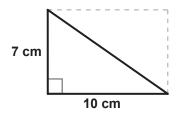


$$A = 30 \times 60 = 1,800 \text{ in}^2$$

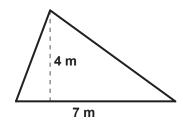
Finding the Area of Triangles

G-AREA 2

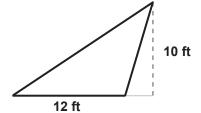
Instructions: Find the area of each triangle using the formula: A = 1/2 (B × H)



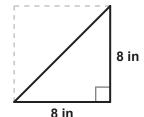
$$A = \frac{1}{2}(10 \times 7) = \frac{70}{2} = 35 \text{ cm}^2$$



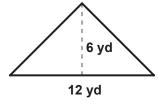
$$A = \frac{1}{2} (7 \times 4) = \frac{28}{2} = 14 \text{ m}^2$$



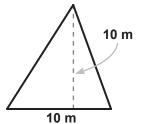
$$A = \frac{1}{2}(12 \times 10) = \frac{120}{2} = 60 \text{ ft}^2$$



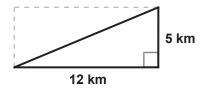
$$A = \frac{1}{2} (8 \times 8) = \frac{64}{2} = 32 \text{ in}^2$$



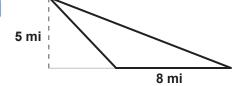
$$A = \frac{1}{2}(12 \times 6) = \frac{72}{2} = 36 \text{ yd}^2$$



$$A = \frac{1}{2} (10 \times 10) = \frac{100}{2} = 50 \text{ m}^2$$



$$A = \frac{1}{2}(12 \times 5) = \frac{60}{2} = 30 \text{ km}^2$$

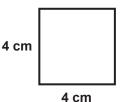


$$A = \frac{1}{2} (8 \times 5) = \frac{40}{2} = 20 \text{ mi}^2$$

Finding the Area: Mixed Practice

Instructions: Find the area of each shape using the formulas you learned in the video.

1



$$A = 4 \times 4 = 16 \text{ cm}^2$$

3



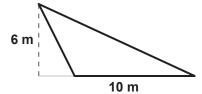
20 ft

$$A = 20 \times 10 = 200 \text{ ft}^2$$

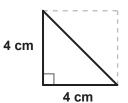
5



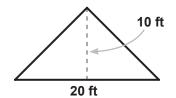
$$A = \frac{1}{2} (14 \times 5) = \frac{70}{2} = (35 \text{ in}^2)$$



$$A = \frac{1}{2} (10 \times 6) = \frac{60}{2} = 30 \text{ m}^2$$

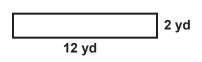


$$A = \frac{1}{2}(4 \times 4) = \frac{16}{2} = 8 \text{ cm}^2$$



$$A = \frac{1}{2} (20 \times 10) = \frac{200}{2} = 100 \text{ ft}^2$$

6



$$A = 2 \times 12 = 24 \text{ yd}^2$$

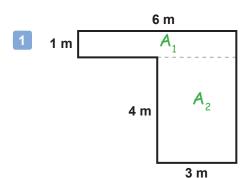


$$A = 15 \times 5 = 75 \text{ mi}^2$$

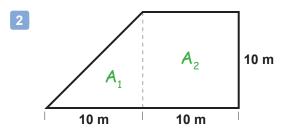
Finding the Area of Composite Shapes - Set 1

G-AREA 4

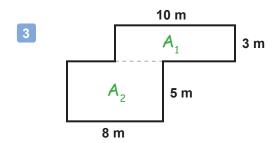
Instructions: Each of these shapes is some combination of quadrilaterals and/or triangles. Find the area of the shape by finding the area of each part that forms it and then adding them up.



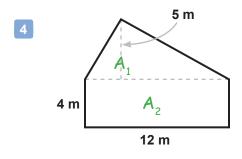
$$A_1 = 1 \times 6 = 6 \text{ m}^2$$
 $A_2 = 4 \times 3 = 12 \text{ m}^2$
 $+ 6$
 $+ 6$
 $+ 6$



$$A_1 = \frac{1}{2} (10 \times 10) = \frac{100}{2} = 50 \text{ m}^2$$
 $A_2 = 10 \times 10 = 100 \text{ m}^2$
 100
 $+ 50$
 150 m^2



$$A_1 = 3 \times 10 = 30 \text{ m}^2$$
 total
 $A_2 = 5 \times 8 = 40 \text{ m}^2$ 30
 $+ 40$
 70 m^2



$$A_1 = \frac{1}{2} (12 \times 5) = \frac{60}{2} = 30 \text{ m}^2$$
 $A_2 = 4 \times 12 = 48 \text{ m}^2$
 $\begin{array}{c} \text{total} \\ 30 \\ + 48 \end{array}$
 $\begin{array}{c} 78 \text{ m}^2 \end{array}$

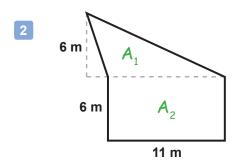
Finding the Area of Composite Shapes - Set 2

G-AREA 5

Instructions: Each of these shapes is some combination of quadrilaterals and/or triangles. Find the area of the shape by finding the area of each part that forms it and then adding them up.

11 m A₁ A₂ 3 m

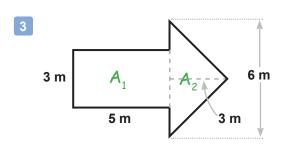
$$A_1 = 4 \times 11 = 44 \text{ m}^2$$
 total
 $A_2 = 7 \times 3 = 21 \text{ m}^2$ 44
 $+ 21$
 65 m^2



$$A_1 = \frac{1}{2} (11 \times 6) = \frac{66}{2} = 33 \text{ m}^2$$

$$A_2 = 11 \times 6 = 66 \text{ m}^2$$

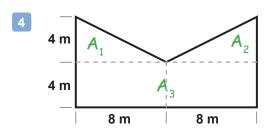
$$\begin{array}{c} \text{total} \\ 33 \\ + 66 \\ \hline \end{array}$$



$$A_1 = 3 \times 5 = 15 \text{ m}^2$$

$$A_2 = \frac{1}{2} (6 \times 3) = \frac{18}{2} = 9 \text{ m}^2$$
total





$$A_1 = \frac{1}{2} (8 \times 4) = \frac{32}{2} = 16 \text{ m}^2$$
 $A_2 = \text{ same as } A_1 = 16 \text{ m}^2$
 $A_3 = 4 \times 16 = 64 \text{ m}^2$
 16
 16
 16
 16
 16
 16

Finding Area and Perimeter

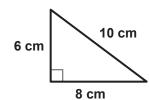
G-AREA 6

Instructions: Now that you know how to find both the perimeter and area, find both quantities for each of the following shapes. Don't forget to include the units in your answers!

1

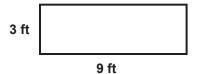
$$A = 4 \times 11 = 44 \text{ m}^2$$

2



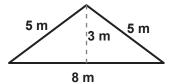
$$A = \frac{1}{2}(8 \times 6) = \frac{48}{2} = 24 \text{ cm}^2$$

3



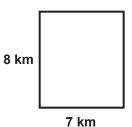
$$A = 3 \times 9 = 27 \text{ ft}^2$$

4



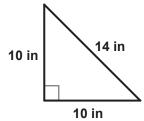
$$A = \frac{1}{2}(8 \times 3) = \frac{24}{2} = 12 \text{ m}^2$$

5



$$P = 7 + 8 + 7 + 8 = 30 \text{ km}$$

$$A = 7 \times 8 = 56 \text{ km}^2$$



$$A = \frac{1}{2} (10 \times 10) = \frac{100}{2} = 50 \text{ in}^2$$