

Name: \_\_\_\_\_

# Area of Rectangles & Triangles

### Area of a Triangle

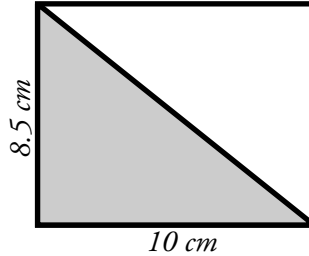
$$\frac{1}{2} \times (b \times h) = A$$

To find the area of a triangle, multiply  $\frac{1}{2} \times$  **base**  $\times$  **height**.

### Area of a Rectangle

$$l \times w = A$$

To find the area of a rectangle, multiply **length**  $\times$  **width**.



Area of the shaded triangle:

$$b = 10 \text{ cm}$$

$$h = 8.5 \text{ cm}$$

$$\frac{1}{2} \times 10 \text{ cm} \times 8.5 \text{ cm} = 42.5 \text{ cm}^2$$

Area of the rectangle:

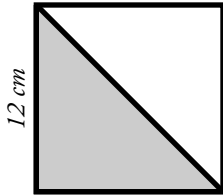
$$l = 10 \text{ cm}$$

$$w = 8.5 \text{ cm}$$

$$10 \text{ cm} \times 8.5 \text{ cm} = 85 \text{ cm}^2$$

Find the area of each rectangle and shaded triangle.

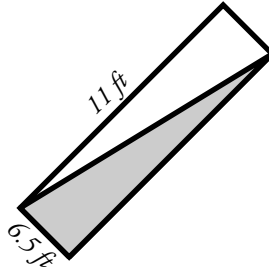
a.



area of the square = \_\_\_\_\_

area of the triangle = \_\_\_\_\_

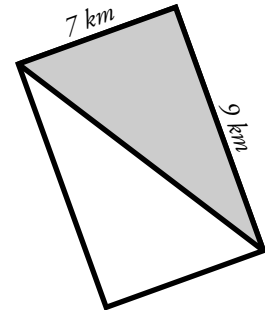
b.



area of the rectangle = \_\_\_\_\_

area of the triangle = \_\_\_\_\_

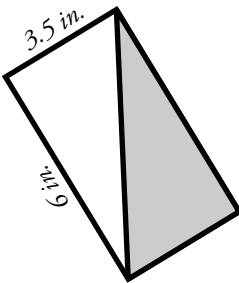
c.



area of the rectangle = \_\_\_\_\_

area of the triangle = \_\_\_\_\_

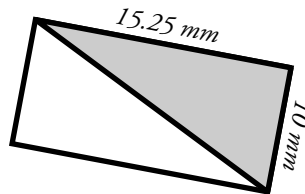
d.



area of the rectangle = \_\_\_\_\_

area of the triangle = \_\_\_\_\_

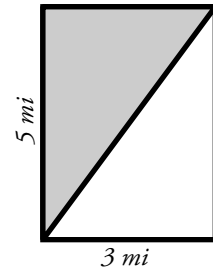
e.



area of the rectangle = \_\_\_\_\_

area of the triangle = \_\_\_\_\_

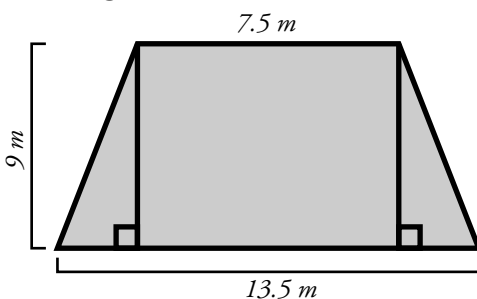
f.



area of the rectangle = \_\_\_\_\_

area of the triangle = \_\_\_\_\_

**Challenge:** Find the area of the polygon. Use the back if you need work space.



\_\_\_\_\_

# ANSWER KEY

## Area of Rectangles & Triangles

### Area of a Triangle

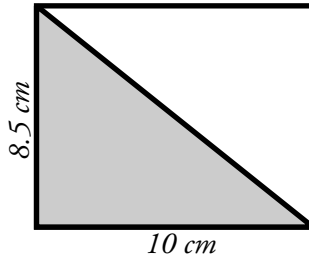
$$\frac{1}{2} \times (b \times h) = A$$

To find the area of a triangle, multiply  $\frac{1}{2} \times$  **base**  $\times$  **height**.

### Area of a Rectangle

$$l \times w = A$$

To find the area of a rectangle, multiply **length**  $\times$  **width**.



Area of the shaded triangle:

$$b = 10 \text{ cm}$$

$$h = 8.5 \text{ cm}$$

$$\frac{1}{2} \times 10 \text{ cm} \times 8.5 \text{ cm} = 42.5 \text{ cm}^2$$

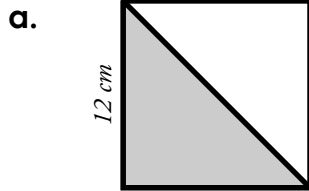
Area of the rectangle:

$$l = 10 \text{ cm}$$

$$w = 8.5 \text{ cm}$$

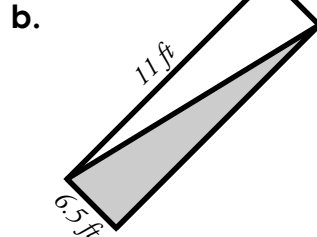
$$10 \text{ cm} \times 8.5 \text{ cm} = 85 \text{ cm}^2$$

Find the area of each rectangle and shaded triangle.



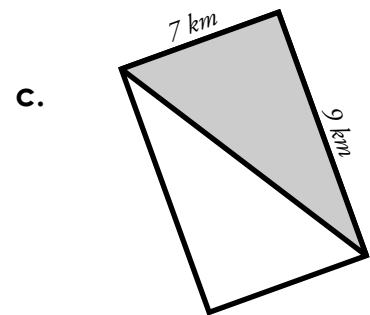
area of the square = 144 cm<sup>2</sup>

area of the triangle = 72 cm<sup>2</sup>



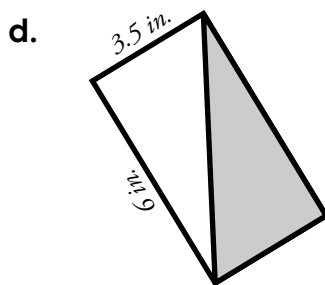
area of the rectangle = 71.5 ft<sup>2</sup>

area of the triangle = 35.75 ft<sup>2</sup>



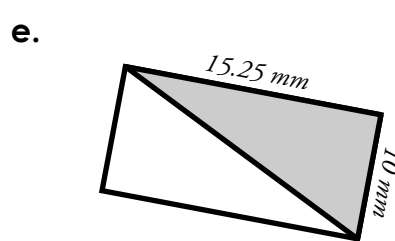
area of the rectangle = 63 km<sup>2</sup>

area of the triangle = 31.5 km<sup>2</sup>



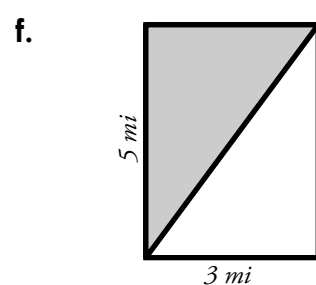
area of the rectangle = 21 in.<sup>2</sup>

area of the triangle = 10.5 in.<sup>2</sup>



area of the rectangle = 152.5 mm<sup>2</sup>

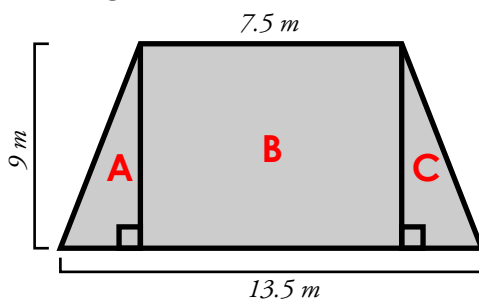
area of the triangle = 76.25 mm<sup>2</sup>



area of the rectangle = 15 mi<sup>2</sup>

area of the triangle = 7.5 mi<sup>2</sup>

**Challenge:** Find the area of the polygon. Use the back if you need work space.



$$\text{area of } \triangle A = (9 \times 3) \times \frac{1}{2} = 13.5 \text{ m}^2$$

$$\text{area of } \square B = 9 \times 7.5 = 67.5 \text{ m}^2$$

$$\text{area of } \triangle C = (9 \times 3) \times \frac{1}{2} = +13.5 \text{ m}^2$$

$$\underline{\underline{94.5 \text{ m}^2}}$$