

Algebra 1 9/22

**Warm Up
Practice
AIMS Web**

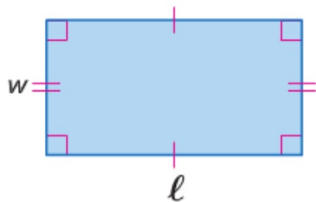
0-8 Area

I can find the area of two dimensional figures

Area

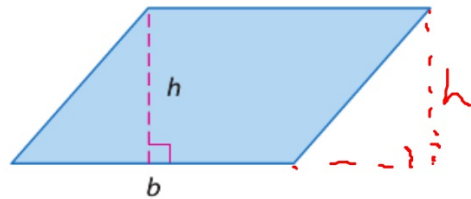
the number of square units need to cover a surface

Rectangle



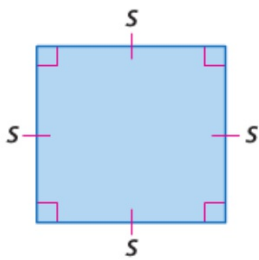
$$A = \ell w$$

Parallelogram



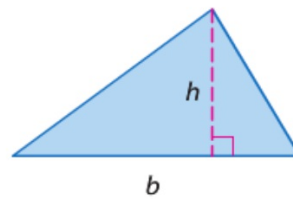
$$A = bh$$

Square



$$A = s^2$$

Triangle



$$A = \frac{1}{2}bh$$

I can find the area of two dimensional figures

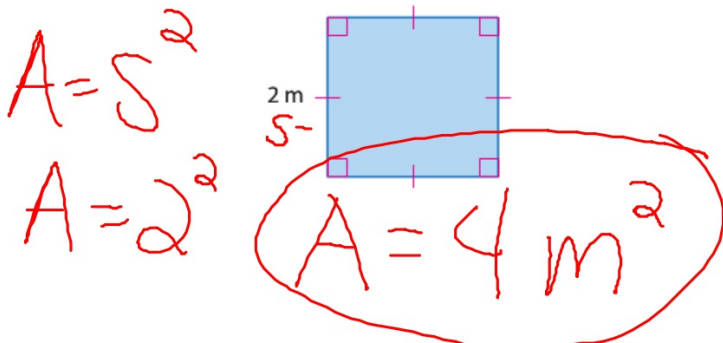
Ex. 1 Find the area of each figure.

a. a rectangle with a length of 7 yards and a width of 1 yard



$$A = lw = 7 \cdot 1$$
$$A = 7 \text{ yd}^2$$

b. a square with a side length of 2 meters

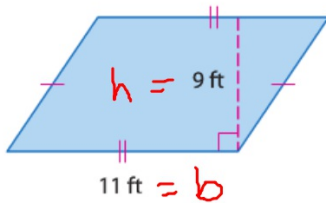


$$A = s^2$$
$$A = 2^2$$
$$A = 4 \text{ m}^2$$

I can find the area of two dimensional figures

Ex. 2 Find the area of each figure.

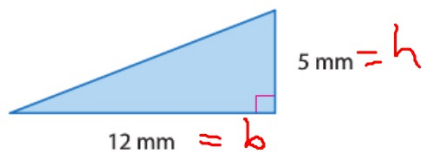
- a. a parallelogram with a base of 11 feet and a height of 9 feet



$$A = 99\text{ ft}^2$$

$$A = bh = 11 \cdot 9$$

- b. a triangle with a base of 12 millimeters and a height of 5 millimeters



$$\begin{aligned} A &= \frac{1}{2}bh \\ &= \frac{1}{2} \cdot 12 \cdot 5 \\ &= 6 \cdot 5 \end{aligned}$$
$$A = 30\text{ mm}^2$$

I can find the area of two dimensional figures

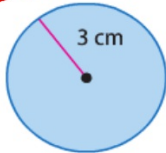
Area of a circle formula $A = \pi r^2$

Area equals pi times the radius squared

Ex. 3 Find the area of each circle to the nearest tenth.

a. a radius of 3 centimeters

$$A = 28.34$$

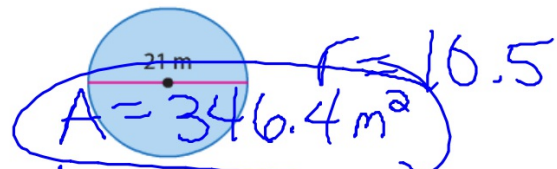


$$A = 28.3 \text{ cm}^2$$

$$\begin{aligned} A &= \pi r^2 \\ &= \pi \cdot 3^2 \\ &= 9\pi \end{aligned}$$

b. a diameter of 21 meters

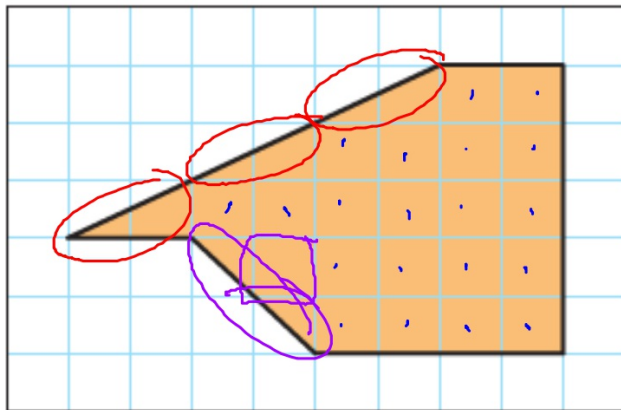
$$r = \frac{d}{2} = \frac{21}{2}$$



$$\begin{aligned} A &= 346.4 \text{ m}^2 \\ A &= \pi \cdot 10.5^2 \\ A &\approx 110.25\pi \\ A &\approx 346.36 \end{aligned}$$

I can find the area of two dimensional figures

Ex. 4 Estimate the area of the polygon if each square represents 1 square mile



21 whole
3 whole
1 whole

25 mi²

I can find the perimeter of two dimensional figures

ICA

(In-class assignment)

pg P28 #2-22ev

Hmwk

IXL 7th AA.2 & AA.5