

# 2D Area Review

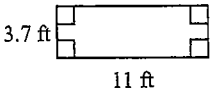
Name \_\_\_\_\_

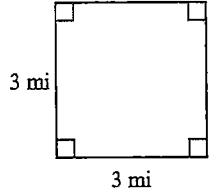
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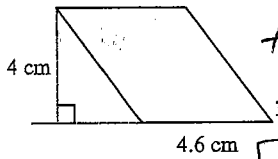
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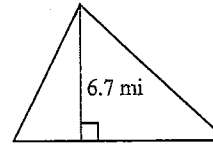
Find the area of each.

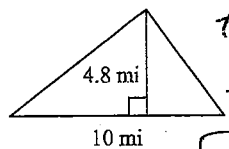
**★ DON'T FORGET UNITS!**

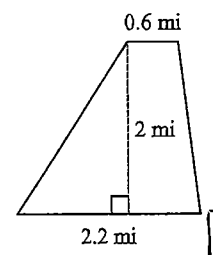
1)   $A = L \times w$   
 $A = 11 \times 3.7$   
 $A = 40.7 \text{ ft}^2$

2)   $A = L \times w$   
 $A = 3 \times 3$   
 $A = 9 \text{ mi}^2$

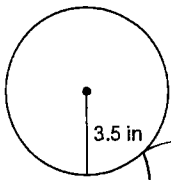
3)   $A = L \times w$   
 $A = 4.6 \times 4$   
 $A = 18.4 \text{ cm}^2$

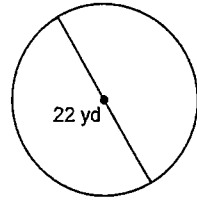
4)   $A = \frac{1}{2} b \times h$   
 $A = \frac{1}{2} 10.7 \times 6.7$   
 $A = 35.845 \text{ mi}^2$

5)   $A = \frac{1}{2} b h$   
 $A = \frac{1}{2} \times 10 \times 4.8$   
 $A = 24 \text{ mi}^2$

6)   $A = \left(\frac{a+b}{2}\right) h$   
 $A = \left(\frac{0.6+2.2}{2}\right) (2)$   
 $A = (2.8) (2)$   
 $A = 2.8 \text{ mi}^2$

Find the area of each. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.

7)   $A = \pi r^2$   
 $A = \pi (3.5)^2$   
 $A = 38.5 \text{ in}^2$

8)   $A = \pi r^2$   
 $A = \pi \left(\frac{D}{2}\right)^2$   
 $A = \pi \left(\frac{22}{2}\right)^2$   
 $A = \pi (11)^2$   
 $A = \pi \cdot 121$   
 $A = 380.140^2$

Find the missing measurement. Round your answer to the nearest tenth.

9)

Area = 75.9 mi<sup>2</sup>

$$A = LW$$

$$75.9 = 6.9 \times w$$

$$\frac{75.9}{6.9} = \frac{6.9 \times w}{6.9}$$

$$11 \text{ mi} = w$$

10)

Area = 32.8 yd<sup>2</sup>

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

$$32.8 = \frac{1}{2}(11.7)h$$

$$32.8 = 5.85 \times h$$

$$\frac{32.8}{5.85} = \frac{5.85 \times h}{5.85}$$

$$5.614 = h$$

11)

Area = 36.5 m<sup>2</sup>

$$A = LW$$

$$36.5 = 6.3 \times w$$

$$\frac{36.5}{6.3} = \frac{6.3 \times w}{6.3}$$

$$5.79 \text{ m} = w$$

12)

Area = 49 in<sup>2</sup>

$$A = \frac{a+b}{2}h$$

$$49 = \frac{a+9.9}{2} \times 7$$

$$\frac{49}{7} = \frac{(a+9.9) \times 7}{7}$$

$$14 = a + 9.9$$

$$-9.9 \quad -9.9$$

$$4.1 \text{ in} = a$$

Find the radius of the circle. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.

13) area = 78.5 km<sup>2</sup>

$$A = \pi r^2$$

$$78.5 = \pi r^2$$

$$\frac{78.5}{\pi} = \frac{\pi r^2}{\pi}$$

$$\sqrt{24.99} = \sqrt{r^2}$$

$$5 \text{ km} = r$$

THE OPPOSITE  
of  $x^2$   
IS  $\sqrt{x}$

Find the diameter of the circle. Use your calculator's value of  $\pi$ . Round your answer to the nearest tenth.

14) area = 452.4 mi<sup>2</sup>

$$A = \pi r^2$$

$$452.4 \text{ mi} = \pi r^2$$

$$\frac{452.4}{\pi} = \frac{\pi r^2}{\pi}$$

$$\sqrt{144} = \sqrt{r^2}$$

$$12 \text{ mi} = r$$