

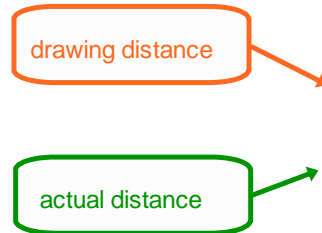
**7.5, 8.1-8.2**

**Review**

## 7.5 - Scale Drawings:

The measurements in scale drawings and models are proportional to the measurements of the actual object.

**scale:** ratio



model measurement  
actual measurement

### Practice

1) A map has a scale of 1 in. : 4 mi.

a. You measure 3 inches between your house and the movie theater. How many miles is it from your house to the movie theater?

- Write the scale as a fraction
- Write a proportion
- Cross-multiply
- Solve for the missing variable

b. It is 17 miles to the mall. How many inches is that on the map?

## Practice

- 2) The diameter of the moon is 2160 miles. A model has a scale of 1 in. : 150 mi. What is the diameter of the model?

- Write the scale as a fraction
- Write a proportion
- Cross-multiply
- Solve for the missing variable

## Scale Factor

The scale factor is when you have a simplified version of the scale with the same units.

- Write the scale as a fraction
- Convert to like units
- Simplify

model measurement  
actual measurement

3) A scale drawing of a soccer field is shown. The actual soccer field is 300 feet long.

a) What is the scale of the drawing?



b) What is the scale factor of the drawing?

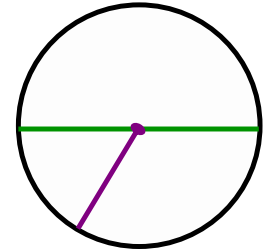
4) A scale drawing of a rose is 3 inches long. The actual rose is 1.5 feet long.

a) What is the scale of the drawing?

b) What is the scale factor of the drawing?

## **8.1 - Circles and Circumference:**

5) What are the TWO relationships that a radius and diameter have with each other?



6) What relationship does the circumference have with the diameter of a circle?

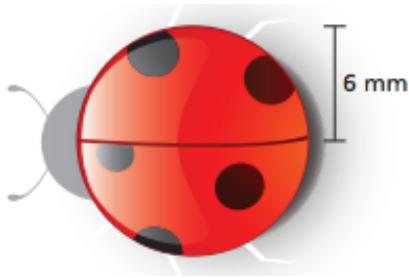
7) What are two formulas that you can use to find the circumference of a circle?



## **8.1 - Circles and Circumference:**

8) The radius of a circle is 11 inches. Find the diameter.

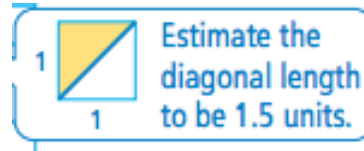
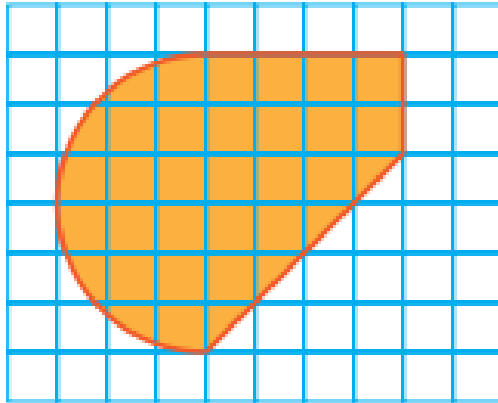
9) Find the circumference of the circle. Use 3.14 or  $\frac{22}{7}$  for  $\pi$ .



- Write the formula
- Plug-in the necessary info
- Solve for the missing variable

## 8.1 – Perimeters of Composite Shapes:

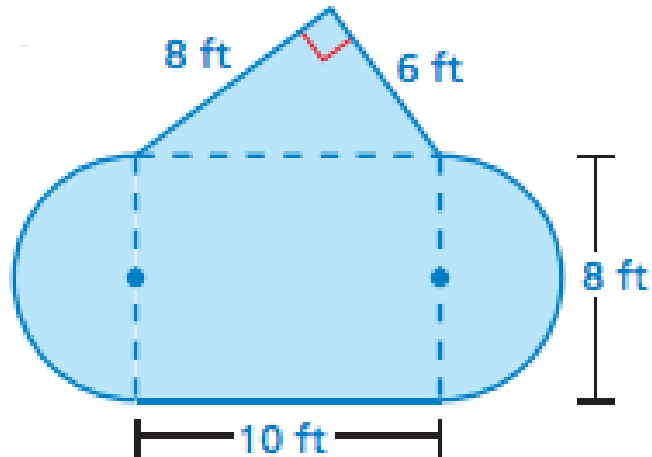
10) Estimate the perimeter of the shape.



- Find the circumference
- Find half the circumference
- Add the straight sides

## 8.1 – Perimeters of Composite Shapes:

11) The figure is made up of a semicircle and a triangle. Find the perimeter.



- Find the circumference
- Find half the circumference
- Add the straight sides