

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

## WEEK 16 HW

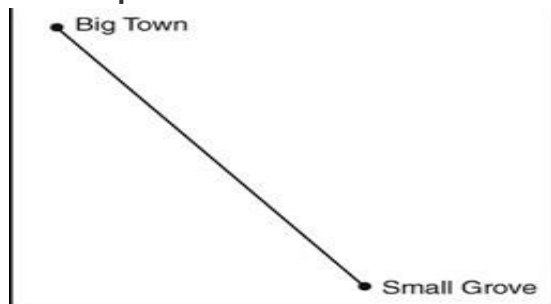
Solve the following problems without a calculator. You MUST show your work.  
**NO WORK = NO CREDIT.**

### Homework – Monday

1. What is the complement of an angle that measures  $28^\circ$ ?

2. What is the supplement of an angle that measures  $117^\circ$ ?

3. A map is shown below.



Scale: 1 inch = 300 miles

What is the actual distance between Big Town and Small Grove, if they are 2.5in apart on the map?

4. A photograph was reduced using the scale factor of  $\frac{2}{3}$ . The original photograph was 9 inches wide and 12 inches long. Which proportion could be used to find  $w$ , the width of the reduced photograph?

A)  $\frac{9}{w} = \frac{2}{3}$

C)  $\frac{12}{w} = \frac{2}{3}$

B)  $\frac{w}{9} = \frac{2}{3}$

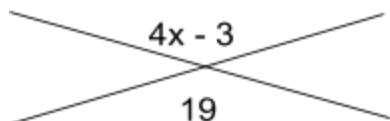
D)  $\frac{w}{12} = \frac{2}{3}$

### Homework – Tuesday

1. Explain the difference between complementary and supplementary angles.

2. Explain the difference between adjacent and vertical angles.

3. Find the value of  $x$ .



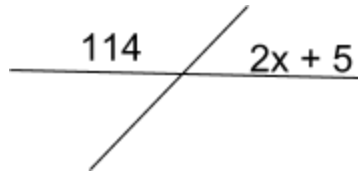
4. A scale drawing of a room used a scale of 2.75 inches = 5 feet. An object is 4 inches long in the drawing. What is the approximate length of the actual object? (Round to the nearest hundredth.)

### Homework - Wednesday

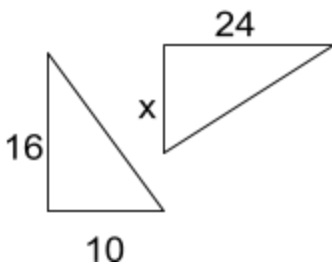
1. Given the value of the missing angle measures:

Angle	Complement	Supplement	Vertical
35°			
86°			

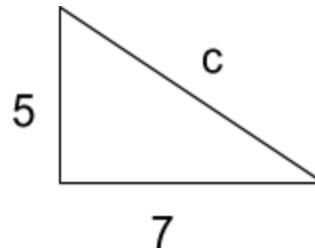
2. Find the value of x.



3. The two triangles are similar what is the missing side?

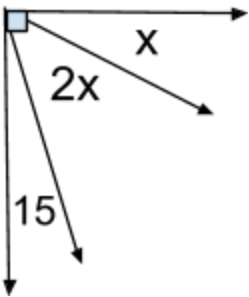


4. Use the formula  $a^2 + b^2 = c^2$  to find the missing side length. (Round to the nearest tenth.)

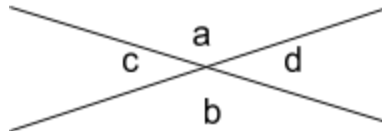


### Homework - Thursday

1. Find the value of x.



2. Which angles are congruent?



3. Write an equation that would be used to find the supplement of a given angle.

4. Write an equation that would be used to find the complement of a given angle.