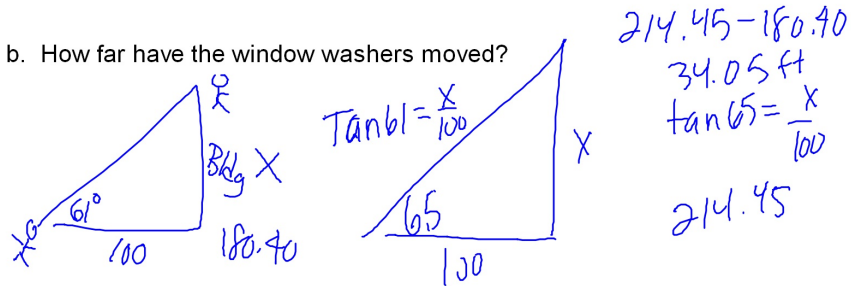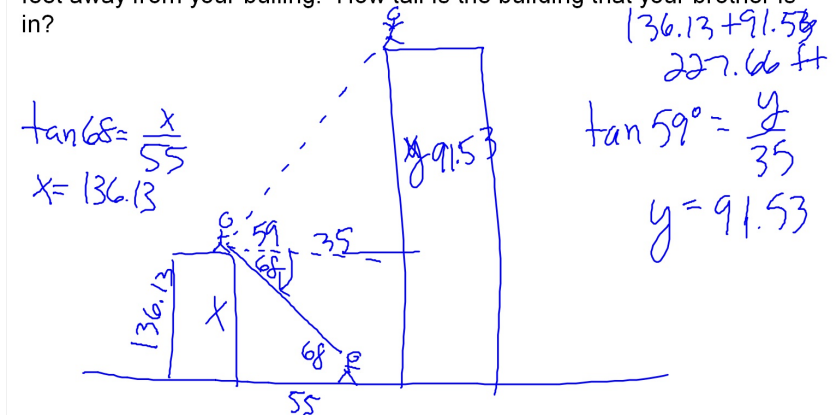You walk 100 feet away from the entrance of a skyscraper turn around and look up at an angle of elevation of 61° and see some window washers at work. You stop to talk on your cell phone. When your conversation is done you look up at an angle of elevation of 65° to see the same window washwers.

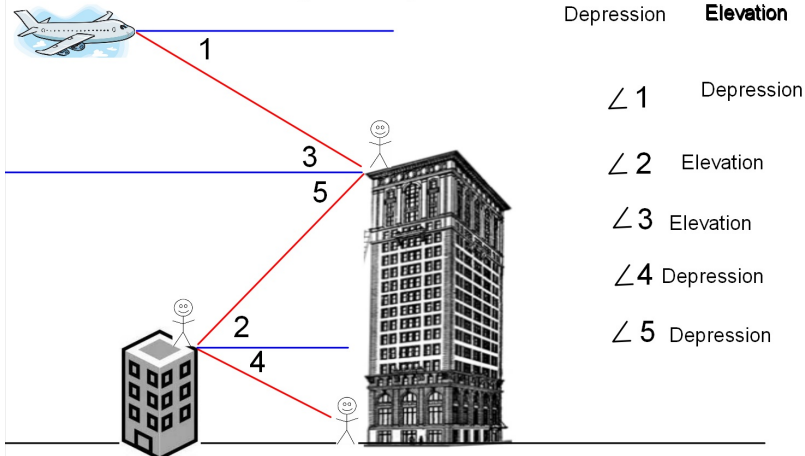a. Have the window washers moved up or down the side of the building?

b. How far have the window washers moved?

$$\tan 61 = \frac{x}{100}$$

Bldg X

61°

100   180.40

65

100

$$214.45 - 180.40$$
$$34.05 ft$$
$$\tan 65 = \frac{x}{100}$$

214.45

You are on the roof of a tall building and see your Mom on the ground with an angle of depression of 68°. Your Mom is 55 feet from your building. At the same time you look up at an angle of elevation of 59° and see your brother on the roof of the building across the street, which is 35 feet away from your builing. How tall is the building that your brother is in?

$$\tan 68 = \frac{x}{55}$$
$$x = 136.13$$

59   35

68

55

136.13

91.53

$$136.13 + 91.53$$
$$227.66 ft$$

$$\tan 59° = \frac{y}{35}$$
$$y = 91.53$$

Describe each angle in the diagram as either an angle of elevation or an angle of depression.

Depression   **Elevation**

1

3

5

2

4

∠1   Depression

∠2   Elevation

∠3   Elevation
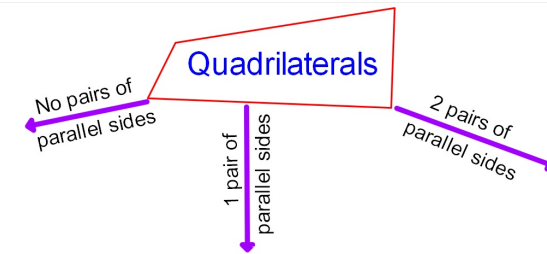
∠4   Depression

∠5   Depression

Hwk #13

Sec 8-5

Pages 447-449

Problems 1-4, 11, 14, 15, 17, 28, 29

Due Monday

Sec 6-1   Classifying Quadrilaterals

Quadrilateral: A polygon with four sides.

Quadrilaterals

No pairs of parallel sides

1 pair of parallel sides

2 pairs of parallel sides

What are some name of Quadrilaterals that you know:

parallelogram
Rhombus
Trapezoid → Isosceles trap
Square
Rectangle
Kite

Quadrilaterals

No pairs of parallel sides

1 pair of parallel sides

2 pairs of parallel sides

Kite

Trapezoid

Isosceles Trapezoid

Parallelogram

Rhombus

Rectangle

Square