Extra Practice 10.2   Name: **Answer Key**

Similarity and Measurement

Date:_____ Hour:_____

Solve for _x_. The polygons in each pair are similar.

1)

12

9

28.4

21.3

_x_ + 3

20

12

12

2)

12

3

4_x_ – 4

5

6

3)

16

8

10

3

8

2_x_ – 16

5

10

4)

20

3_x_ + 10

12

24

35

21

10

5)

25

35

20

14

2_x_ – 6

8

8

6)

25

35

30

42

20

3_x_ + 3

7
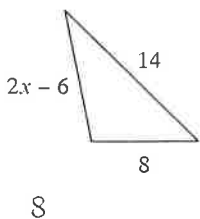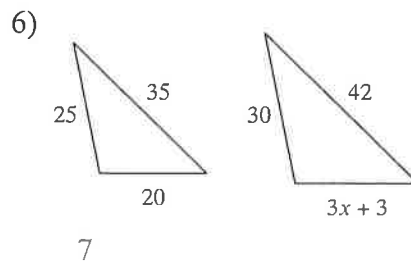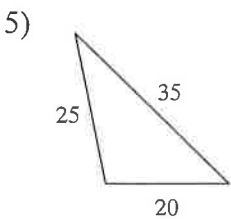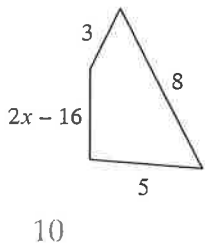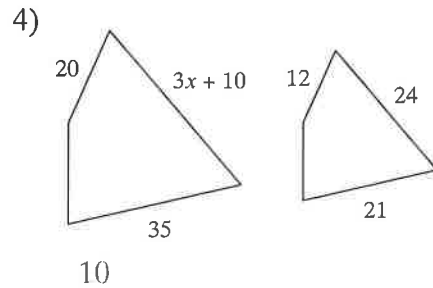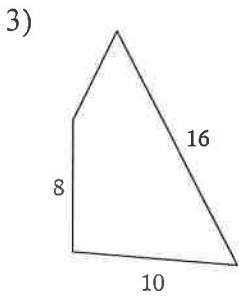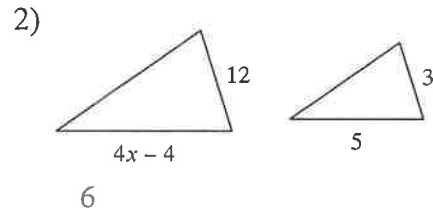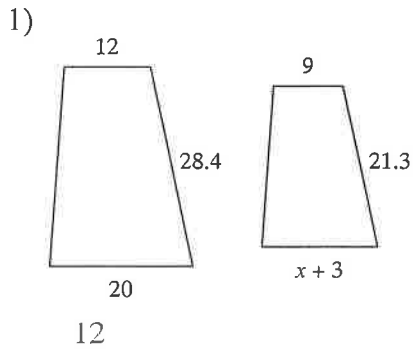
7) A man is standing next to a cactus. The man is 5.5 ft tall and casts a 2 foot shadow. The cactus casts an 8 foot shadow. How tall is the cactus?

22 ft

8) A woman is standing next to the flagpole. The woman is 6 ft tall and her shadow is 18 inches long. The shadow of the flagpole is 12 feet long. How tall is the flagpole?

48 ft