**Homework 4.10 - Similarity Real World - Honors Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Show Work on Another Paper  
 1. Draw Picture 2. Set up proportions 3. Solve and Circle answer**

1. A statue of George Washington is also in Druid Hill Park. If a girl stands 15 m away from the statue and places a mirror 12 m from the statue (3 m from her feet), she can see the top of the statue in the mirror. The girl’s height is 1.7 m. How tall is the statue?

2. Two extension ladders are leaning at the same angle against a vertical wall. The 7-ft ladder reaches 2.8 ft up the wall. How much farther up the wall does the 20-ft ladder reach?  
  
3. On a sunny day, Michelle and Nancy noticed that their shadows were different lengths. Nancy measured Michelle's shadow and found that it was 96 inches long. Michelle then measured Nancy's shadow and found that it was 102 inches long.

|  |  |
| --- | --- |
| **a.** | Who do you think is taller, Nancy or Michelle? Why? |
| **b.** | If Michelle is 5 feet 4 inches tall, how tall is Nancy? |
| **c.** | If Nancy is 5 feet 4 inches tall, how tall is Michelle? |
|  |  |

**Homework 4.10 - Similarity Real World - Honors Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Show Work on Another Paper  
 1. Draw Picture 2. Set up proportions 3. Solve and Circle answer**

1. A statue of George Washington is also in Druid Hill Park. If a girl stands 15 m away from the statue and places a mirror 12 m from the statue (3 m from her feet), she can see the top of the statue in the mirror. The girl’s height is 1.7 m. How tall is the statue?

2. Two extension ladders are leaning at the same angle against a vertical wall. The 7-ft ladder reaches 2.8 ft up the wall. How much farther up the wall does the 20-ft ladder reach?  
  
3. On a sunny day, Michelle and Nancy noticed that their shadows were different lengths. Nancy measured Michelle's shadow and found that it was 96 inches long. Michelle then measured Nancy's shadow and found that it was 102 inches long.

|  |  |
| --- | --- |
| **a.** | Who do you think is taller, Nancy or Michelle? Why? |
| **b.** | If Michelle is 5 feet 4 inches tall, how tall is Nancy? |
| **c.** | If Nancy is 5 feet 4 inches tall, how tall is Michelle? |