HW 7-4

Int 1   **Proportions and Review**   **Unit 7**

Solve each proportion.

1. $\dfrac{1.5}{6} = \dfrac{10}{p}$

2. $\dfrac{6}{25} = \dfrac{m}{30}$

3. $\dfrac{2}{y} = \dfrac{0.4}{0.7}$

4. $\dfrac{x}{13} = \dfrac{18}{39}$

5. $\dfrac{44}{x} = \dfrac{11}{5}$

6. $\dfrac{2.5}{6} = \dfrac{h}{9}$

7. Crystal's mother kept a record of Crystal's height at different ages. She recorded the information in a table. Is the relationship between Crystal's age and her height proportional? Show your work and explain how you know.

Age (yr)	Height (in)
0 (birth)	19
1	25
2	30
5	42
10	55
12	60

8. The table shows the cost to have various numbers of pizzas delivered from Pizza Hut. Is the relationship between the cost and the number of pizzas proportional? Show your work and explain how you know.

# of Pizzas	Cost ($)
1	12.50
2	20
3	27.50
4	35

9.   Brenna charges $15, $30, $45, and $60 for babysitting 1, 2, 3, and 4 hours, respectfully. Is the relationship between the amount charged and the number of hours proportional? If so, find the unit rate. If not, explain why it would not be proportional.
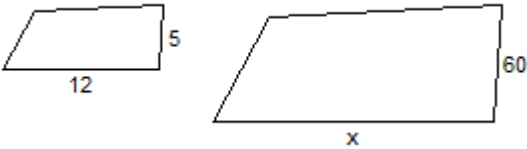
Find the unit rate for each.

10.   50 miles on 2.5 gallons

11.   2,500 kilobytes in 5 minutes

Find the missing side length.
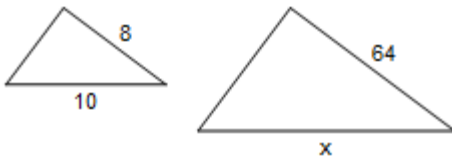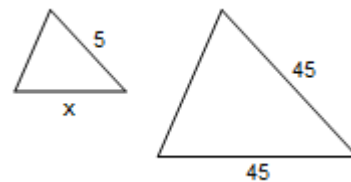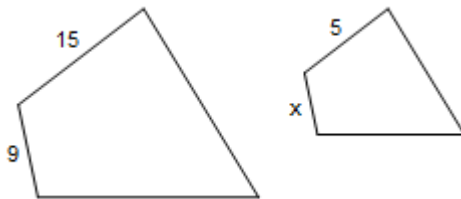
12.

15.

13.

16.

14.

17.

Determine whether the following tables represent a constant rate of change or not. If they do, state the constant rate of change. Remember that your constant rate of change must be a fraction and contain words.

18.

Minutes	0	2	4	6
Water Left in Pool (gallons)	200	180	160	140

19.

Weeks	Weight (lbs)
2	158
4	142
6	135
8	124

20.

Time (h)	0	1	2	3
Wages ($)	0	9	18	27

21.

Time (s)	Distance (m)
1	22
2	30
3	38
4	46