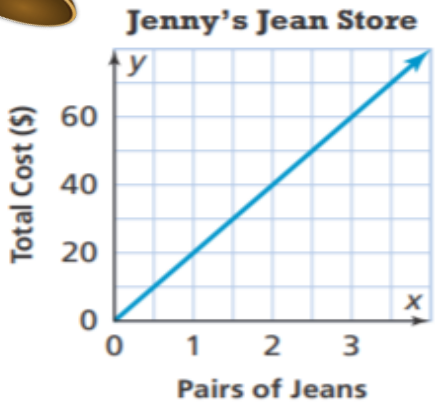
Name: _____ Date: _____ Pd: _____

Homework - Math 8 **Mrs. Shea**

Monday Dec. 2nd

1. Leveled Practice The graph and the table show the total cost to the number of pairs of jeans purchased at two different stores. Which store charges the higher cost for a pair of jeans?



Jean Warehouse				
Pairs of Jeans	2	3	4	5
Total Cost ($)	36	54	72	90

Find the unit rate (constant of proportionality) for Jenny's Jean Store.

$\frac{\text{cost}}{\text{pairs}} = \frac{\square}{\square} = \$\square$ per pair

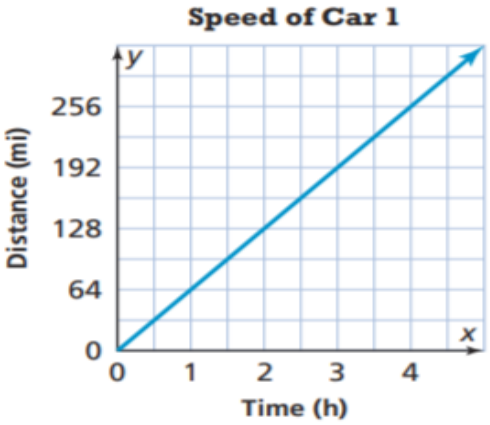
Find the unit rate (constant of proportionality) for Jean Warehouse.

$\frac{\text{cost}}{\text{pairs}} = \frac{\square}{\square} = \$\square$ per pair

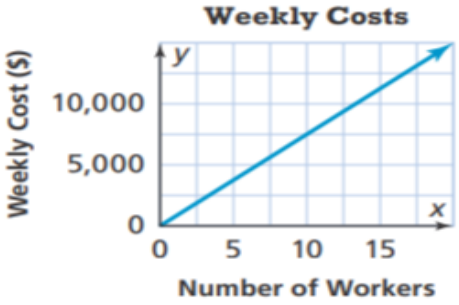
So _____ charges the higher rate.

Tuesday Dec. 3rd

2. The graph shows the average speed of Car 1 which is traveling on a highway. The equation $y = 55x$ represents the average speed of Car 2, where y is the distance in miles and x is the time in hours. Which car is traveling at the greater speed?



3. The graph shows a proportional relationship between the number of workers and weekly cost, in dollars, for a company in its first year. The following year, the company spends $7,200 per 12 employees. Did the rate increase or decrease the following year?



Wednesday Dec. 4th

4. $2(x + 40 + 7x) = 4x + 20$

$2(\_\_\_\_\_x + 40) = 4x + 20$

$2(\_\_\_\_\_x) + 2(\_\_\_\_\_) = 4x + 20$

$\_\_\_\_\_x + \_\_\_\_\_ = 4x + 20$

$16x + 80 - \_\_\_\_\_x = 4x + 20 - \_\_\_\_\_x$

$\_\_\_\_\_x + 80 - \_\_\_\_\_ = 20 - \_\_\_\_\_$

$\_\_\_\_\_x = \_\_\_\_\_$

$x = \_\_\_\_\_$

5. $-3(3x - 5) + 4x = 30$

Thursday Dec. 5th

6. $-4x + 3x + 2 = 6$

7. $6 - x - 3x = -10$

8. $3 + 3x + 5 + 4x = 29$

9. $4x + 6 = x + 12$

10. $6x - 6 = 3(x + 2)$