

Ratios, Proportion, Percent Review

DOMAIN REVIEW

The table shows the time, in hours, it took 4 people to walk different distances, in miles. Find the speeds of the walkers as unit rates and order them from slowest to fastest. Write the name of each person to order the unit rates.

Name	Distance (in miles)	Time (in hours)
Caleb	$\frac{2}{3}$	$\frac{1}{2}$
Nina	$\frac{5}{6}$	$\frac{4}{5}$
Yoshi	$\frac{1}{2}$	$\frac{1}{3}$
Regina	$\frac{3}{4}$	$\frac{2}{3}$

Molly can drive her car 112 miles on 4 gallons of gas and 182 miles on 6.5 gallons.

Write an equation that represents the relationship between g , the number of gallons of gas she has in her car and m , the number of miles she can drive. Then use the equation to find how many gallons she would need to drive 420 miles. Show your work.

During a sale at the grocery store, Mrs. Reynolds bought 4.2 pounds of green beans for \$5.25. Is each of the following proportional to the sale price of the green beans? Select Yes or No.

- 6 pounds for \$7.50 Yes No
- 3.4 pounds for \$4.25 Yes No
- 3.5 pounds for \$4.20 Yes No
- 5.8 pounds for \$8.70 Yes No
- 2 pounds for \$2.50 Yes No

The tiles show how much a retailer pays for different items and what the items sell for in the store. Write the name of each item in the correct box.

Bracelet
cost: \$15
selling price: \$19.25

Greeting Card
cost: \$1.19
selling price: \$1.50

CD
cost: \$10.80
selling price: \$12.95

Speakers
cost: \$44.55
selling price: \$54.99

Soccer Ball
cost: \$23.75
selling price: \$29.95

Rocking Chair
cost: \$61
selling price: \$75.99

Markup Less Than 25%

Markup Greater Than 25%

Three neighbors time how long it takes them to mow their lawns. Draw a line from each person's name to the correct unit rate.

- Jorge: $\frac{1}{3}$ acre in $\frac{5}{6}$ hour
- Josh: $\frac{2}{3}$ acre in $\frac{2}{3}$ hour
- Cindy: $\frac{1}{4}$ acre in $\frac{1}{2}$ hour
- Jorge: $\frac{1}{2}$ acre per hour
- Josh: $\frac{2}{3}$ acre per hour
- Cindy: $\frac{3}{8}$ acre per hour

The table shows the number of cars washed and the amount earned by the car wash over several days. Circle the number or term that makes the statement true.

Day	Cars Washed	Earnings
Monday	44	\$418
Tuesday	68	\$646
Wednesday	72	\$684
Thursday	88	

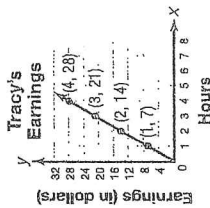
The first 3 rows of the table represent a _____ relationship.
 proportional
 nonproportional

\$792

The car wash earned \$820 for washing 88 cars on Thursday.

\$836

The graph shows Tracy's earnings from babysitting.

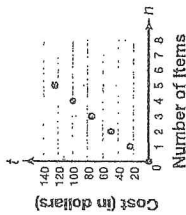


Does the graph show a proportional relationship? If so, what is the constant of proportionality and what does it represent? Explain your answers.

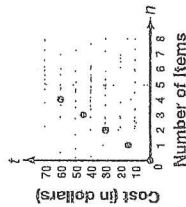
Antonio works as a salesperson in a store where he earns a 4% commission on his total sales. Last week, he had sales of \$5,820 on Monday, \$4,600 on Tuesday, \$8,550 on Wednesday, \$10,500 on Thursday, and \$8,210 on Friday. Select True or False for each statement.

- A. Antonio earned \$345 in commission on Wednesday. True False
- B. Antonio earned a total of \$1,507.20 in commission for the week. True False
- C. To earn a commission of \$60, Antonio needs to have \$1,500 in sales. True False

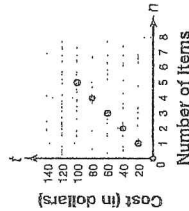
The graphs represent the total cost, t , of buying n items at a market. Draw a line from each graph to the equation that represents the proportional relationship.



$t = 15n$



$t = 20n$



$t = 25n$

- 11 A bicycle tire completes $\frac{9}{10}$ of a revolution every $\frac{1}{3}$ second. How many revolutions will the tire complete every minute? Show your work.

- 12 Margie and four of her friends are eating lunch at a restaurant. The total bill is \$52.50 before tax and tip.

Part A

Margie has a coupon good for \$10 off their total purchase. If sales tax of 6% is collected on the discounted amount, what is the total cost after tax?

\$ _____

Part B

The friends want to give a 20% tip based on the cost of the meal before the discount and sales tax are applied. What is the amount of the tip they will leave?

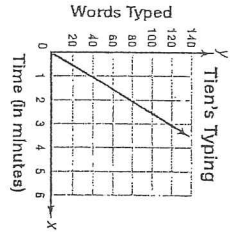
\$ _____

Part C

If the group of friends splits the bill evenly, including tax and tip, what is each person's share?

\$ _____

- 13 The line represents the relationship between the number of words Tien can type and the amount of time in minutes. Fill in each blank to make each statement true.



The ordered pair _____ represents the unit rate of the relationship.
 The ordered pair (3, 120) means that Tien can type _____ in _____.

