

Math 7– Chapter-1 Practice test

SCORE _____

Be sure to show your work on each question.

1. What is the unit rate if there are 92 miles driven using 4 gallons of gas?

$$\frac{92}{4} = \frac{23}{1}$$

1. $\frac{23}{1}$

2. What is the Constant Rate of Change of the table below?

Hours	2	4	6	8
Miles	70	140	210	280

MILES
HR

2. 35 miles per hour

$$\frac{70}{2} = \frac{35}{1}$$

3. What is the value of y in the proportion $\frac{3}{16} = \frac{9}{y}$?

$$\frac{3}{16} \cdot \frac{16}{3} = \frac{9}{y} \cdot \frac{16}{3}$$

$$y = 48$$

3. 48

4. Which size package of pasta shown in the table has the lowest unit price?

Size (oz)	Cost (\$)
3	0.99
8	2.59
16	5.59
32	11.89

$$\frac{0.99}{3} = \frac{0.33}{1 \text{ oz}}$$

$$0.32375$$

$$\frac{2.59}{8} = 0.32$$

$$\frac{5.59}{16} = 0.349375$$

4. 8 oz.

$0.33/\text{oz}$
 $0.32/\text{oz}$
 $0.35/\text{oz}$
 $0.37/\text{oz}$

COST
OZ

$$\frac{11.89}{32} = 0.371563$$

5. The table shows the cost for ordering a certain number of pies. What is the value of x if the cost is proportional to the number of pies ordered?

Pizzas Ordered	2	3	4	5
Cost	\$14.50	\$21.75	\$29.00	x

$$\frac{14.50}{2} = \frac{7.25}{1}$$

$$\frac{29.00}{4} = 7.25$$

$$\frac{7.25}{1} = 7.25$$

$$\frac{36.25}{5} = 7.25$$

$$7.25(5)$$

5. 36.25

6. What is the Constant Rate of Change of the linear function?

Game, x	3	4	5	6
Score, y	24	32	40	48

$$\text{CONSTANT RATE OF CHANGE} = \frac{y}{x}$$

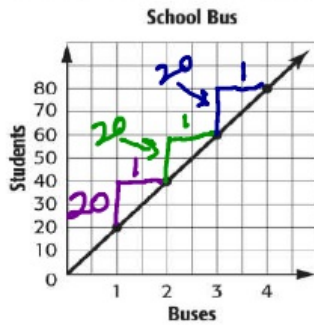
$$\frac{24}{3} = \frac{8}{1}$$

$$\frac{40}{5} = \frac{8}{1}$$

6. $\frac{8}{1}$

7. What is the **Constant Rate of Change** of the graph below?

7. 20 students per bus



$$\frac{20}{1}$$

8. What is the unit rate for \$120 for 8 hours?

$$\frac{120}{8} = \frac{15}{1}$$

8. $\frac{15}{1}$

9. What is the unit rate for 8 glasses of water every 24 hours?

$$\frac{8}{24} = \frac{1}{3}$$

9. $\frac{1}{3}$ GLASSES PER HOUR

10. The table shows the cost for ordering a certain number of tacos. What is the value of x if the cost is proportional to the number of tacos ordered?

10. \$7.80

Tacos Ordered	2	3	4	6
Cost	\$2.60	\$3.90	\$5.20	x

$$\frac{2.60}{2} = \frac{1.30}{1}$$

Handwritten annotations: 1.3 under 2, 1.3 under 3, 2.6 under 4.

11. Sanjay can travel 342 miles in 6 hours. At this rate, how far can he travel in 5 hours?

11. 285 MILES

$$\frac{342}{6} = \frac{57}{1}$$

$$57 + 57 + 57 + 57 + 57 = 57(5)$$

12. What is the **Slope** of the line?

12. $\frac{7}{1}$

