

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?

$$\frac{92}{4} = 92 \div 4 = \underline{23}$$

1. YOU CAN DRIVE 23 MILES PER GAL.

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

Hours	2	4	6	8
Miles	70	140	210	280

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

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

$$\frac{16(9)}{3} = \frac{3y}{3}$$

$$\frac{144}{3} = y$$

$$y = 48$$

3. 48

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

LOWEST PRICE PER OZ.

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

4. THE 8 OZ IS THE LOWEST PRICE

$$\frac{0.99}{3} = 0.33 \quad \frac{2.59}{8} = 0.32$$

$$\frac{5.59}{16} = 0.35 \quad \frac{11.89}{32} = 0.37$$

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

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

\$7.25 EACH

$$\$7.25(5) \rightarrow$$

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

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

$$\frac{32}{4} = 8$$

$$\frac{48}{6} = 8$$

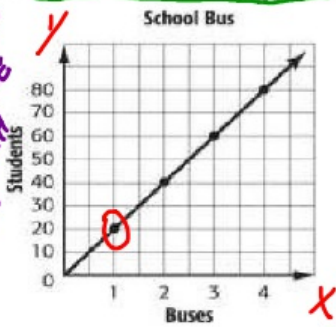
$$\frac{40}{5} = 8$$

6. 8

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

7. 20 students per bus

PROPORTIONAL RELATIONSHIP - STRAIGHT LINE - GOES THROUGH THE ORIGIN



Y/X
How many students on one bus? 20

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

8. \$15 PER HOUR

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

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

9. _____

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

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

1.30
1.30(6) = 7.80
2.60 + 5.20 = 7.80
3.90 + 3.90 = 7.80

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

11. 285 MILES

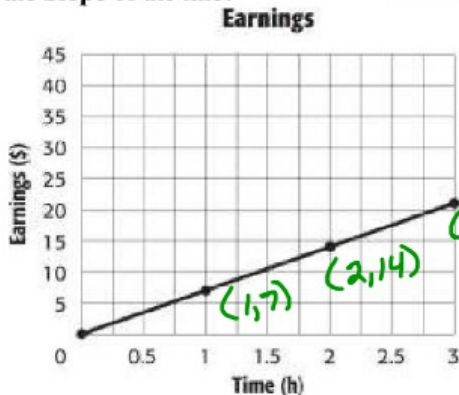
$$\frac{342}{6} = 57 \quad 57(5)$$

$$\uparrow 342 - 57 = 285$$

$$\frac{342}{6} = \frac{x}{5}$$

12. What is the Slope of the line?

12. _____



SLOPE = RISE (UP) / RUN (OVER)

SLOPE = 7