Chapter 5 & 6 Review 1 Worksheet

Provide the correct vocabulary term for each definition for problems 1-6.

1. An equation stating two ratios or rates are equal.

2. An equation comparing the part to the whole.

3. A method used to determine whether two ratios form a proportion.

4. A ratio of two quantities with different units.

5. A relationship formed by two quantities with the same ratio or rate.

6. A rate that has been reduced to have a denominator of one.

Find each unit rate for problems 7-8. Round to the nearest hundredth if necessary.

7. 48 miles in 5 hours

8. $10.50 for 15 pounds

9. A grocery store sells 6 bottles of water for $4.80 and 18 bottles of water for $22.50. Is the cost of the water proportional to the number sold? Explain why or why not.

10. Darron is making hamburgers and plans on using $1\frac{1}{3}$ cups of bread crumbs. How many pounds of hamburger does Darron need to use to keep the relationship between bread crumbs and hamburger proportional?

Bread Crumbs (c)	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$
Hamburger (lb)	1	2	3

11. Solve: $\frac{x}{6} = \frac{3}{8}$

12. Solve: $\frac{4.3}{2.5} = \frac{w}{4}$

13. Four out of every nine households have high-speed internet. If 42,700 households in a certain city have high-speed internet, how many do not have high-speed internet?

Find each missing value for problems 14-17.

14. 20% of 120 is what number?

15. 15 is 15% of what number?

16. 15 is what percent of 48?

17. 35% of what number is 42?

18. Macy has completed 78% of the 50 questions on the test. How many questions has Macy completed?

19. Find each percent of change from 75 meters to 25 meters. Round to the nearest whole percent.

20. Kenzie bought a shirt for $18. The next day she saw the shirt was selling for $24.60. What is the percent of change?

21. The regular price of a new washer and dryer is $975 and the sale price is $850. Find the percent of change to the nearest whole percent.
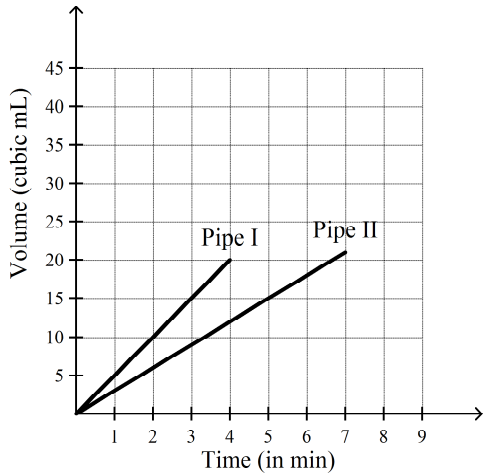
Find the total cost or sale price to the nearest cent for problems 22-24.

22. $6.95 lunch; 20% tip

23. $30 bat; 15% discount

24. $10 binder; 60% discount; 6% tax

25. Scott wants to tip his taxicab driver. If his commute cost $15 and he wants to give the driver a 20% tip, what is the total cost with 8% tax?

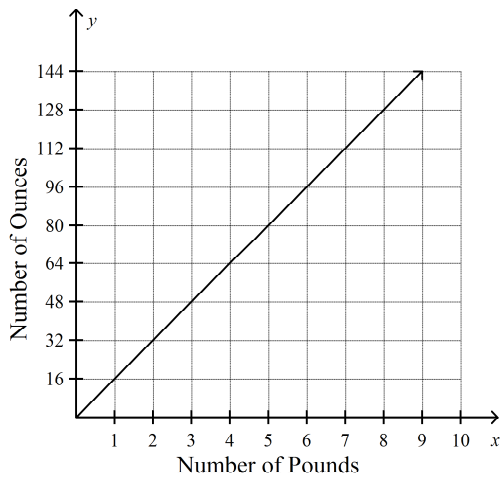**Find the simple interest paid to the nearest cent for problems 26-27.**

26. $1,400, 3.8%, 2 years

27. $628, 5%, 4 months

28. Mr. Fraser bought new shingles for his house for $3,500 using a credit card. His card has an interest rate of 17%. If he does not pay off his balance at the end of the month and has no other charges, how much money will he owe on his credit card at the end of the month?

29. The rate of flow of water through two pipes is shown in the graph below. Express each rate of flow as a unit rate. How long would it take to fill a tank whose capacity is 300 cubic mL with pipe I and pipe II separately?

Problems 30-34: Determine whether a proportional relationship exists between the two quantities shown in the graph or table below. Explain your reasoning.
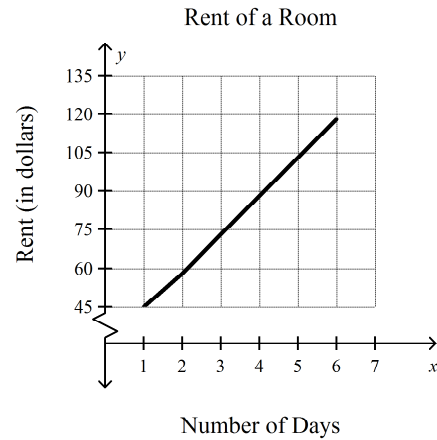
30.

31.

Gallons	Pints
x	y
1	8
2	16
3	24
4	32

32.

Time (s)	Distance (m)
x	y
0	0
1	12
2	24
3	36

33.

34.