Name _____

Date _____ Pd_____

PERCENTS UNIT TEST

Solve the problems below. Be sure to show your thinking.

1. Marie purchased a $49.00 gift for a baby shower. She uses a coupon that offers 20% off. How much will Marie spend on the gift after the coupon? _____	2. A shipping box should weigh 1.0 pound. If there is a 10% error on the weight, what is the range of acceptable weight? A. 1.0 – 1.10 B. 0.9 – 1.0 C. 1.10 – 1.20 D. 0.9 – 1.10
3. A recipe for apple cider calls for 4 cups of apple juice and 3 cups of water. Which equation can be used to find x, the percent of apple juice in the recipe? A. $\frac{4}{3} = \frac{x}{100}$ B. $\frac{3}{4} = \frac{x}{100}$ C. $\frac{7}{3} = \frac{100}{x}$ D. $\frac{7}{4} = \frac{100}{x}$	4. Romeo paid $380.75 in car repairs. The sales tax rate is 7.5%. Which of the following is a reasonable estimate for the total Romeo paid to repair his car? A. $28.50 B. $410.00 C. $352.50 D. $442.00
5. A local flower shop sells a dozen roses for $12.85. Based on this information, which of the following could be true? A. $38.55 for four dozen roses B. $64.25 for five dozen roses C. $25.70 for 18 roses D. $32.13 for two dozen roses	6. Taylor plans to borrow $4,500 from the bank to purchase a used vehicle. If he borrows the money at a rate of 4% interest for 2 years, what is the total amount he will have to pay back to the bank? _____

7. Javier worked the following hours in the month of October. What was the percent increase from week 2 to week 4?	8. Airfare from Atlanta, GA to Nashville, TN was decreased from $250 to $180. By what percentage did the cost of the airfare change?

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WEEK	HOURS
1	18
2	25
3	24
4	33

_____

8. Airfare from Atlanta, GA to Nashville, TN was decreased from $250 to $180. By what percentage did the cost of the airfare change?

A. An increase of 28%

B. An increase of 39%

C. A decrease of 28%

D. A decrease of 39%

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9. Which set of ratios below is NOT equivalent to 3:4?

A. 6 to 9, $\frac{9}{12}$

B. 9 to 12, $\frac{15}{20}$

C. $\frac{15}{20}$, 24:32

D. $\frac{30}{40}$, 18:24

10. The Hoskins family spends $600 per month on groceries for their family. If this is 15% of their monthly budget, then what is their monthly budget?

_____

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11. Sophia invests $12,500 in an account that earns 4% annual simple interest. Assuming she makes no additional deposits or withdrawals, how much interest will Sophia earn after 3 years?

A. $1,250
B. $1,500
C. $2,500
D. $14,000

12. A propeller rotates 6 times every 15 seconds. Based on this information, which of the following could NOT be true?

A. The propeller rotates 30 times in 90 seconds.
B. The propeller rotates 24 times in one minute.
C. The propeller rotates 18 times in 45 seconds.
D. The propeller rotates 12 times in 30 seconds.

13. Students are asked to estimate the number of gumballs in a jar. Ian says there are 228 gumballs. In actuality, there are 240 gumballs. What is the percent error?

A. 3.5%
B. 6%
C. 5%
D. 12%

14. Paula pays $19.92 for 2.4 pounds of walnuts. What is the price per pound of walnuts?

_____

15. The table below shows the various ways students get home from school. What percent of students walk home from school?

	WALK	BUS	CAR
# OF STUDENTS	36	26	18

_____

16. The cake walk fundraiser sold 44 tickets during the first day of the fundraiser. This was 22% of the total tickets. How many tickets were sold to the cake walk fundraiser?

A. 160 tickets
B. 180 tickets
C. 200 tickets
D. 240 tickets

17. Mr. Robins earns a commission on each airfare he books. At the end of the day, he had booked $208.60 worth of airfare and earned $31.29. Approximately what is Mr. Robins' commission rate?

A. 10%
B. 15%
C. 8.5%
D. 7%

18. Of the 650 students at Westmoreland Junior High, 4% will receive a perfect attendance award. How many students will receive the award?

_____

19. A wise financial principle states that your rent should be no more than 30% of your income. Which equation can be used to find x, the amount Emilio should spend on rent if he brings home $2,000 per month?

A. $\frac{30}{100} = \frac{2,000}{x}$ B. $\frac{30}{2,000} = \frac{100}{x}$

C. $\frac{2,000}{100} = \frac{30}{x}$ D. $\frac{30}{100} = \frac{x}{2,000}$

20. A gym membership is offered in January for $29.00 per month. If you pay upfront for the year, you are given a 20% discount on the monthly cost. How much money do you save after a year by paying upfront rather than monthly?

_____

PERCENTS UNIT TEST

Solve the problems below. Be sure to show your thinking.

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1. Marie purchased a $49.00 gift for a baby shower. She uses a coupon that offers 20% off. How much will Marie spend on the gift after the coupon?

$39.20
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A. 1.0 – 1.10

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3. A recipe for apple cider calls for 4 cups of apple juice and 3 cups of water. Which equation can be used to find x, the percent of apple juice in the recipe?

A. $\dfrac{4}{3} = \dfrac{x}{100}$ B. $\dfrac{3}{4} = \dfrac{x}{100}$

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4. Romeo paid $380.75 in car repairs. The sales tax rate is 7.5%. Which of the following is a reasonable estimate for the total Romeo paid to repair his car?

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6. Taylor plans to borrow $4,500 from the bank to purchase a used vehicle. If he borrows the money at a rate of 4% interest for 2 years, what is the total amount he will have to pay back to the bank?

$4,860
_____

7. Javier worked the following hours in the month of October. What was the percent increase from week 2 to week 4?

WEEK	HOURS
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3	24
4	33

_____ 32%

8. Airfare from Atlanta, GA to Nashville, TN was decreased from $250 to $180. By what percentage did the cost of the airfare change?

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C. A decrease of 28%

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9. Which set of ratios below is NOT equivalent to 3:4?

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B. 9 to 12, $\frac{15}{20}$

C. $\frac{15}{20}$, 24:32

D. $\frac{30}{40}$, 18:24

10. The Hoskins family spends $600 per month on groceries for their family. If this is 15% of their monthly budget, then what is their monthly budget?

$$\frac{15}{100} = \frac{600}{x}$$

_____ $4,000

11. Sophia invests $12,500 in an account that earns 4% annual simple interest. Assuming she makes no additional deposits or withdrawals, how much interest will Sophia earn after 3 years?
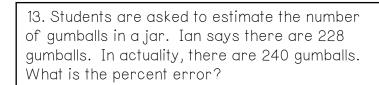
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# OF STUDENTS	36	26	18 | _____ 45%	16. The cake walk fundraiser sold 44 tickets during the first day of the fundraiser. This was 22% of the total tickets. How many tickets were sold to the cake walk fundraiser? A. 160 tickets B. 180 tickets **C. 200 tickets** ⊛ D. 240 tickets
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19. A wise financial principle states that your rent should be no more than 30% of your income. Which equation can be used to find x, the amount Emilio should spend on rent if he brings home $2,000 per month? A. $\frac{30}{100} = \frac{2,000}{x}$ B. $\frac{30}{2,000} = \frac{100}{x}$ C. $\frac{2,000}{100} = \frac{30}{x}$ **D. $\frac{30}{100} = \frac{x}{2,000}$** ⊛	20. A gym membership is offered in January for $29.00 per month. If you pay upfront for the year, you are given a 20% discount on the monthly cost. How much money do you save after a year by paying upfront rather than monthly? _____ $69.60