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# Accelerated Grade 6 Review for Assessment #12

***You will be able to use a calculator on this assessment.***

***SHOW YOUR WORK on all questions!***

1. Stephanie opens an account with $1,500 when she is 13 years old and is offered a simple interest rate of 3%. She wants to be able save $2,000 to buy a car by the time she turns 20 years old. Will she earn enough interest to make the purchase? **Use the formula I = prt to explain your answer.**

2. Emma has $600 in her savings account, and Lauren has $730 in her savings account. The interest rate is 1.5% and is not compounded. How much more money will Lauren have in her savings account at the end of 1 year than Emma? **Use the formula I = prt to explain your answer.**

3. What percent of 26 is 29?

4. A family goes out to dinner and receives a bill totaling $62.50.

**PART A:** If there is a 6% tax, how much is the bill for dinner and tax? Round your answer to the nearest cent.

**PART B:** If the family adds an 18% tip to the bill (after tax is added), what is the total cost for dinner, tax, and tip? Round your answer to the nearest cent.

5. For each year that a gift card goes unused, the value of the card decreases by 15%. What is the value of a $50.00 gift card after 4 years? (Hint: think of this as a simple interest problem!)

6. A pair of shoes that you want to buy just went on sale. The original price was $29 and the sale price is $18.85. What percent is the original price marked down?

7. A worker has to drive her car as part of her job. She receives money from her company to pay for the gas she uses. The table shows a proportional relationship between *y*, the amount of money that the worker receives, and *x*, the number of work-related miles driven.

|  |  |
| --- | --- |
| **Mileage Rates** | |
| **Distance Driven, x (miles)** | **Money Received, y (dollars)** |
| 15 | 7.20 |
| 20 | 9.60 |
| 30 | 14.40 |
| 35 | 16.80 |

**Part A**: What is the unit rate in dollars per mile?

**Part B**: The worker received $27.84 for work-related miles that she drove. Using your unit rate from Part A, determine the number of work-related miles she drove.

**Part C**: One day, the worker drove a total of 82 work-related and personal miles. Using your answer from part B, what percent of her total miles driven were work-related that day?

8. A game that usually costs $14.99 is on sale for 20% off. How much does it cost? Round your answer to the nearest cent.

9. In a survey of 120 sixth graders and 130 seventh graders at NEMS, 15% of sixth graders were interested in participating in chorus while 19% of seventh graders were interested. Which grade level has more students interested in participating in chorus? Explain how you determined your answer.

10. The selling price of a phone this year is $399. The price this year is 4% more than the selling price of each phone last year. What was the selling price of the phone last year? **Explain your answer**.

11. Is the percent of increase from 85 to 90 the same as the percent of decrease from 90 to 85? **Justify your answer**.