**M7 Unit 6 Percents Study Guide Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  | **What is the question asking?** | **WORK** |
| 1. What percent of 40 is 11? If necessary, round to the nearest tenth of a percent. |  |  |
| 2. Find 77% of 170. Round to the nearest tenth if necessary. |  |  |
| 3. 20 is 50% of what number? If necessary, round to the nearest tenth. |  |  |
| 4. Emma has already read 5 of 29 books on her summer reading list. What percent of the books on her list has she read already? |  |  |
| 5. Tamika makes a 4% commission selling electronics. How much commission does she make if she sells a flat-screen TV for $8,000? |  |  |
| 6. The Mogul Runners ski club planned a trip to Park City. Of the total number of club members, 11 signed up to go. If this is 44% of the club, how many members does the ski club have? |  |  |
| 7. Video games are on sale for 35% off. If a particular game regularly sells for $99.50, what is the sale price? |  |  |
| 8. All swimming equipment is on sale with a 10% discount. A snorkeling set regularly sells for $55. Find the amount of discount. |  |  |
| 9. A toy store’s percent of markup is 45%. A model train costs the store $70. Find the amount of markup. |  |  |
| 10. A sporting goods store pays $150 for a rubber raft. The percent of markup is 40%. Find the raft’s selling price. |  |  |

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|  | **What is the question asking?** | **WORK** |
| 11. Find the percent of increase from 380 to 500. Round to the nearest tenth of a percent if necessary. |  |  |
| 12. Find the percent of decrease if a video game that cost $200 was on sale for $20. Round to the nearest tenth of a percent if necessary. |  |  |
| 13. Jordan invested $600 in a savings account. The interest rate is 6% per year. Find the simple interest earned in 3 years. Then find the total of principal plus interest. |  |  |
| 14. A loan officer provides you a simple interest loan at a rate of 5%. After 1 years, you have paid the entire principal plus $25.00 in interest. What was the original principal amount of your loan? |  |  |
| 15. You invest $275.00 in a money-market account that pays simple interest at a rate of 3%. How long must you leave your investment in the money-market account if you expect to earn $8.25 in interest? |  |  |
| 16. Emma and her family went to Outback Steakhouse for dinner. Their total bill was $59.75. Their server did a good job so they want to tip her 18%. Find how much their tip will be. |  |  |
| 17. Joe diets and goes from 155 pounds to 130 pounds. What was his percentage weight loss? Round to the nearest whole number. |  |  |
| 18. Jared uses a thermometer and finds the boiling point of ethyl alcohol to be 76ºC. He looks in a reference book and finds that the boiling point should be 80ºC. What is his percent error to the nearest tenth of a percent? |  |  |
| 19. What would the percentage error be if a person predicted that there were 32 jelly beans in a container, but when they were counted, it was found that there were actually 40 beans in the bottle? |  |  |
| 20. There are 35 dogs and cats at the pet store. Sixteen of those students are dogs. What percent of the store are cats? Round to the nearest whole number. |  |  |

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**Answer Section**

**SHORT ANSWER**

 1. 27.5%

 2. 130.9

 3. 40.0

 4. 17.2%

 5. $320

 6. 25 members

 7. $64.68

 8. $5.5

 9. $31.5

 10. $210

 11. 31.6%

 12. 90%

 13. $108.00; $708.00

 14. $500.00

 15. 1 years

 16. $10.76

 17. 16%

 18. 5.3%

 19. 20%

 20. 54%