

Practice 4-3

Proportions and Percent Equations

Solve each problem.

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|----------------------------------|-------------------------------|------------------------------|
| 1. 25% of what is 28? | 2. What percent of 72 is 18? | 3. 60% of what is 45? |
| 4. What percent of 12 is 6? | 5. What is 60% of 12? | 6. 75% of what is 48? |
| 7. What is 20% of 650? | 8. What percent of 150 is 90? | 9. What percent of 90 is 63? |
| 10. What is 38% of 60? | 11. 22.5% of what is 42? | 12. 45% of what is 99? |
| 13. What percent of 210 is 10.5? | 14. 160% of what is 124? | 15. What is 39% of 1500? |
| 16. What is 250% of 14? | 17. What percent of 20 is 36? | 18. What is 8.25% of 160? |

Write an equation to model each question and solve.

19. Pablo has a goal to lose 25 lb. He has lost 16 lb. What percent of his goal has he reached?
20. You spent 16% of your vacation money on food. If you spent \$48 on food, how much money did you spend on your vacation?
21. A writer earns \$3400 a month. Last month she spent \$204 on food. What percent of her income was spent on food?
22. Kiko spends 30% of her monthly income on rent. If she pays \$810 for rent each month, what is her monthly income?
23. Suppose that 62.5% of freshmen entering a college graduate from it. If there are 2680 freshmen, how many will graduate from that college?

The formula for determining simple interest is $I = prt$. Using this formula, solve the following problems.

24. You invest \$1500 for three years. Find the amount of simple interest you earn at an annual rate of 8.25%.
25. Suppose you invested \$1200 for four years. You earned \$312 in simple interest. What is the interest rate?
26. Suppose you invested some money at 8% simple interest for five years. If you received \$500 in interest, how much money did you invest?

Write an equation to model each question and solve.

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| 27. What is 7% of 480? | 28. What percent of 80 is 48? | 29. 90% of what is 27? |
| 30. What is 150% of 26? | 31. 125% of what is 175? | 32. What is 10.25% of 280? |
| 33. What is 35% of 360? | 34. What percent of 36 is 9? | 35. 75% of what is 90? |
| 36. 45% of what is 36? | 37. What is 80% of 120? | 38. What percent of 20 is 8? |
| 39. 25% of what is 92? | 40. What percent of 30 is 90? | 41. What is 39% of 800? |