

SOLVING WHOLE, PART OR % USING EQUATION

$$\text{PART} = \text{WHOLE} \cdot \% (\text{AS A DECIMAL})$$
$$P = W \cdot n$$

FINDING WHOLE

8.6 is 5% of what #?

$$\frac{8.6}{.05} = \frac{.05w}{.05} \quad \text{CONVERT } 5\% = .05$$

$$172 = w$$

FINDING PART

FIND 93% OF 150.

$$P = .93(150)$$

$$P = 139.5$$

FINDING %

18.4 is what % of 10?

$$\frac{18.4}{10} = \frac{10n}{10}$$

THEN
CONVERT
TO %

$$1.84 = n$$

$$n = 184\%$$

Practice 6-4

Percents and Equations

Use an equation to solve each problem. Round to the nearest tenth.

- | | |
|---------------------------------------|--------------------------------------|
| 1. What percent of 80 is 25? _____ | 2. 8.6 is 5% of what number? _____ |
| 3. What is 140% of 85? _____ | 4. 70 is what percent of 120? _____ |
| 5. What percent of 90 is 42? _____ | 6. 18.4 is what percent of 10? _____ |
| 7. 56% of what number is 82? _____ | 8. Find 93% of 150. _____ |
| 9. 30% of what number is 120? _____ | 10. What percent of 420 is 7? _____ |
| 11. 79 is what percent of 250? _____ | 12. 9.1 is 3% of what number? _____ |
| 13. What is 94% of 260? _____ | 14. 45 is what percent of 18? _____ |
| 15. What percent of 280 is 157? _____ | 16. 20.7 is what percent of 8? _____ |
| 17. 114% of what number is 75? _____ | 18. Find 72% of 18,495. _____ |
| 19. 75% of what number is 200? _____ | 20. What percent of 940 is 15? _____ |
| 21. 80 is what percent of 450? _____ | 22. Find 65% of 2,190. _____ |
| 23. 90 is what percent of 40? _____ | 24. 45 is what percent of 900? _____ |
| 25. 82 is 90% of what number? _____ | 26. 50 is 120% of what number? _____ |

Solve.

- | | |
|---|---|
| 27. In a recent survey, 216 people, or 54% of the sample, said they usually went to a family restaurant when they went out to eat. How many people were surveyed?
_____ | 28. In a school survey, 248 students, or 32% of the sample, said they worked part time during the summer. How many students were surveyed?
_____ |
| 29. Juliet sold a house for \$112,000. What percent commission did she receive if she earned \$6,720?
_____ | 30. Jason earns \$200 per week plus 8% commission on his sales. How much were his sales last week if Jason earned \$328?
_____ |
| 31. Stella makes 2% royalties on a book she wrote. How much money did her book earn in sales last year if she made \$53,000 in royalties?
_____ | 32. Linda earns \$40 base pay per week, plus 10% commission on all sales. What were her sales if she made \$112 in one week?
_____ |
| 33. Kevin sold a house for \$57,000. His fee, or sales commission, for selling the house was \$2,679. What percent of the price of the house was Kevin's commission?
_____ | 34. Marik agreed to pay a realtor 6.5% commission for selling his house. If the house sold for \$68,900, how much does Marik have after paying the realtor's commission?
_____ |

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