

Write the percent as a fraction in simplest form, or write the fraction as a percent.

1. 32.5%

2. 20.4%

3. $\frac{3}{11}$

Find the percent of the number.

4. 50% of 85

5. 42% of 20

6. 16% of 105

7. 89% of 250

12. On a math test, you scored 69 points out of 75 total points. On your next math test, you scored 51 points out of 60 total points. For both tests combined, what was your score as a percent of the total points?

Write the percent as a decimal or the decimal as a percent.

13. 123.6%

14. 0.056%

15. 0.008

Write the fraction as a percent.

16. $\frac{13}{2}$

17. $\frac{7}{5}$

18. $\frac{1}{12}$

Find the percent of the number.

19. 16.5% of 60

20. 206% of 35

21. 0.3% of 140

22. A candle factory made 4 million candles last year. Of those, 0.9% were defective. How many candles were defective?

Use a proportion or the percent equation to answer the question.

23. What number is 120% of 74?

24. What number is 0.5% of 8?

25. 25.2 is 42% of what number?

26. 6 is 4% of what number?

27. What percent of 600 is 19?

28. What percent of 5 is 8?

Find the new amount.

33. Increase 75 by 52%. 34. Increase 150 by 2%.
35. Decrease 24 by 25%. 36. Decrease 80 by 30%.
37. You bought a pair of jeans at an outlet store. You see the same jeans at another store for \$51, which is 36% more than you paid for them at the outlet store. How much did you pay for the jeans at the outlet store?

In Exercises 38–40, use the given information to find the total cost.

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| 38. Food bill: \$32 | 39. Food bill: \$20 | 40. Food bill: \$16 |
| Sales tax: 6% | Sales tax: 5% | Sales tax: 7% |
| Tip: 15% | Tip: 22% | Tip: 20% |

In Exercises 41 and 42, use the given information to find the original price. Round your answer to the nearest cent.

41. Retail price: \$40 42. Sale price: \$199
Markup percent: 85% Discount percent: 20%
43. A store marks up the wholesale price of an item by 42%. The retail price is \$75.97. What is the wholesale price?

Find the unknown quantity for an account that earns simple annual interest.

44. $A = \$530$, $P = \underline{\quad? \quad}$, 45. $A = \$3360.50$, $P = \$2600$,
 $r = 4\%$, $t = 15$ years $r = \underline{\quad? \quad}$, $t = 9$ years
46. You deposit \$4280 into a savings account that earns 1.75% interest compounded annually. Use a calculator to find the balance of the account after 8 years. Round your answer to the nearest cent.

Identify the percent of change as an *increase* or a *decrease*. Then find the percent of change.

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| 47. Original: 90
New: 54 | 48. Original: 20
New: 23 |
| 49. Original: 120
New: 144 | 50. Original: 152
New: 133 |
51. Each year, your school organizes a carnival to raise money for a class trip. This year, a total of 1026 people attended the carnival. Last year, a total of 950 people attended the carnival. By what percent did the attendance increase from last year to this year?