

Writing and Solving Percent Problems

I. Mental Math

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|-------------------------------|-----------------|--------------------------------|---------------|
| 1) 10% of 80 | 2) 10% of 600 | 3) 10% of 16.8 | 4) 30% of 80 |
| 5) 70% of 50 | 6) 40% of 9000 | 7) 5% of 80 | 8) 5% of 400 |
| 9) 15% of 80 | 10) 15% of 600 | 11) 25% of 80 | 12) 75% of 80 |
| 13) 25% of 1600 | 14) 75% of 1600 | 15) 1% of 1600 | 16) 2% of 800 |
| 17) 20 is what percent of 40? | | 18) 20 is what percent of 80? | |
| 19) 3 is what percent of 15? | | 20) 50 is what percent of 25? | |
| 21) 6 is 25% of what number? | | 22) 8 is 20% of what number? | |
| 23) 33 is 50% of what number? | | 24) 60 is 300% of what number? | |

II. Convert each percent to a decimal.

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| 25) 3.5% | 26) 430% | 27) $15\frac{3}{5}\%$ | 28) 0.3% |
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III. Write each percent as a fraction or mixed number in simplest form.

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| 29) 35% | 30) $12\frac{1}{2}\%$ | 31) 560% | 32) 4% |
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IV. Write each number as a percent.

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| 33) .002 | 34) $\frac{3}{5}$ | 35) 6.85 | 36) $1\frac{7}{8}$ |
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V. Percent of number

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| 37) Find 28% of 500 | 38) Find $8\frac{1}{4}\%$ of 24,000 |
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VI. Find the percent:

39) 11 is what percent of 20?

40) What percent of 40 is 35?

VII. Finding a number when a percent of it is known.

41) 24 is 15% of what number?

42) 83.7 is $4\frac{1}{2}\%$ of what number?

VIII. Problem Solving:

43) Mike answered 85% of the questions on his test correctly. If there were 80 questions on the test, how many did Mike answer correctly?

44) Bob scored 27 times and missed 3 times. What percentage did he score?

45) Bob's weight decreased from 200 lbs to 136 lbs. Find the percent decrease.

46) 350 girls are enrolled at a middle school. This represents $33\frac{1}{3}\%$ of the students enrolled. How many students attend this middle school?

47) An item is regularly priced at \$40. It is on sale for 20% off. By how much will the item be reduced? What will the sale price be?

48) The price of a ticket to a movie rose from \$8 to \$10. What percent of the old price is the new price?

49) A worker earned a salary of \$500. He paid \$170 in federal taxes. What percent of his salary did he pay in federal taxes?

50) An item that originally cost \$55 was placed on sale for 15% off. After a week it did not sell so the store took off an additional 15%. What was the FINAL selling price?

51) A woman borrowed \$3000 at an annual interest rate of 8%. How much interest will she need to pay back in:

1 year? 6 years? 3 months?

52) An item has been marked up 89% from its wholesale price. The regular price is \$185. Find the item's wholesale price **ROUNDED** to the nearest cent.

53) Following a 25% pay cut, Kenny now earns \$16.50 per hour. What was Kenny's pay before the decrease?

54) Mr. Tallevi went to the store with \$80. He spent 15% of the money on vegetables and 50% of the remainder on meat. How much did he spend on meat?

1. 8	21. 24	41. 160
2. 60	22. 40	42. 1860
3. 1.68	23. 66	43. 68 correct
4. 24	24. 20	44. 90%
5. 35	25. 0.035	45. 32% decrease
6. 3600	26. 4.3	46. 1050 students
7. 4	27. 0.156	47. reduced \$8, sale price \$32
8. 20	28. 0.003	48. 125% of the old price
9. 12	29. 7/20	49. 34% of his salary
10. 90	30. 1/8	50. approx. \$39.74
11. 20	31. 28/5	51. a. \$240 b. \$1440 c. \$60
12. 60	32. 1/25	52. approx. \$97.88
13. 400	33. 0.2%	53. \$22 per hr.
14. 1200	34. 60%	54. \$34 spent on meat
15. 16	35. 685%	
16. 16	36. 187.5%	
17. 50%	37. 140	
18. 25%	38. 1980	
19. 20%	39. 55	
20. 200%	40. 87.5	