

Percent Problems

1. If Ron correctly answers 47 out of 75 questions on an exam, what is his percent?
2. The attendance at school on Friday was 551 students. This was 95% of the total enrolment. What is the total enrolment of the school?
3. Jean earned \$40 babysitting one weekend and spent 15% of her earnings. How much of her earning did she have left over?
4. Nan earns \$2490/month. After income tax, pension, unemployment insurance, etc., her take home pay is only \$1992. What percent of her salary is her take home pay?
5. In one day Brian read 85 pages in a book. If this was 20% of the entire book, how many pages are there in this book?
6. Last week Simon earned \$128. This week he earned \$144. What was the percent increase in his earnings?
7. The price of a car last year was \$18,000. This year it costs only \$16,500 to buy it used. What was the percent decrease in price?
8. Ken received a mark of 80% on a science exam. How many questions did he get wrong if there were 240 questions on the exam?
9. 80% of the programs on CBC are made in Canada. If the CBC runs programs from 8:00 am to 2:00 am each day, how many hours of Canadian programs are on each week?
10. Of 55 people in a room, 35 are women. What percent are men?
11. Mr Potter borrowed \$2000 from a finance company for a period of one year. He paid \$720 in interest. The interest was what percent of the amount borrowed?
12. Miss Comby earned \$360 per week. Then her salary was increased to \$420 per week. By what percent was her salary increased?
13. Glenda bought a winter coat for \$122.40 on sale when the regular price was \$144. What was the rate of discount?
14. The sale price of a food processor after a discount of 20% was \$180. What was the regular price of this processor?
15. A used car had a regular price of \$12,000. The car was first discounted 15% and then by another 10%.
 - a) What was the final selling price of the car?
 - b) What was the total percent discount on the car?

16. Julie saved \$22.05 on a pair of shoes that were on sale for 35% off the regular price.
 - (a) What was the regular price of these shoes and
 - (b) What was the the sale price of these shoes?
17. At Honest Henry's Used Car Lot, a used car salesman sold a car for \$5000 and received a commission of \$250. What is his rate of commission?
18. How much commission is lost if a real estate agent reduces her 4% commission rate to 3.2% on a \$264,000 sale?
19. \$7.47 was the sales tax payable on goods that retailed for \$124.50. What is the rate of the sales tax?
20. How much change does Aurther get from a \$50 bill if he buys a pair of jeans for \$42 and the sales tax is 12%?e
21. A man invested \$2000 at a rate of 4% per annum. What is his balance after one year? After two years? After 10 years?
22. What sum of money was deposited if the interest was \$12 at the end of one year and the rate was 6%?

Bonus:

23. A man has a rectangular patio in his garden. He decides to enlarge it by increasing both length and width by 10%. The percentage increase in area is...
24. Sam's age is 125% of Mary's age. Mary's age is p% of Sam's age. What is the value of p?
25. On a test of 30 questions, Sue had 50% more right answers than she had wrong answers. Each answer was either right or wrong. How many questions did she answer correctly.
26. The cost of wax including, 5% sales tax, is \$1.20. If the price of a can of wax, without sales tax, is reduced to 70% of its original cost, what is the new price before the tax is added?

Answers:

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| 1) 62 $\frac{2}{3}$ % or 63% | 2) 580 | 3) \$34 | 4) 80% | 5) 425 |
| 6) 12.5 % | 7) 8 $\frac{1}{3}$ % | 8) 48 | 9)101 | 10) 36.4% |
| 11) 36% int | 12) 16 $\frac{2}{3}$ % or 17% | 13) 15% | 14) \$225 | 15a)\$9180 b)23.5% |
| 16a)\$63 b)\$40.95 | 17) 5% | 18) \$2112 | 19) 6% | 20) \$2.96 |
| 21) \$2080; \$2163.20; \$2960.49 | | 22) \$200 | | |

