

Basic Percentages and Fractions Practice #3

1. What is 0.005 as a percentage?
2. What is 4 out of 90 as a percentage?
3. What is 8% as a fraction?
4. What is 105% of 75?
5. In a test with 40 questions Tim get 25 correct. What is his percentage mark?
6. 60% of a school's expenses are paid by fund raising efforts. If the total expenses for a year were \$11,562, how much money was contributed from fund raising efforts?
7. A company has $12\frac{2}{5}$ tonnes of stock and sell seven-tenths of it. How much is left?
8. Amanda paid \$388 for a cycle. She sold it a year later for 25% less than what she paid. How much did she sell it for?
9. What is $\frac{5}{9}$ of 1.2?
10. A shampoo manufacturer advertises a new bottle which contains 25% more than the old bottle for the same price. If the old bottle contained 200 ml, how big is the new bottle?
11. A diamond ring increases in value from \$2,000 to \$2,500. What % increase is this?
12. Sam's dad pays $\frac{1}{3}$ of the price of his first car. If Sam pays \$1700, how much was the car?
13. A jersey which was priced at \$80 is reduced to \$60 in a sale. What % reduction is this?
14. If a company expects three-quarters of its trucks to need an overhaul every year, how many overhauls would it expect in a fleet of 28?
15. 187 out of 203 trees planted along a boundary survived. What % of trees survived?
16. A man owes the inland revenue department \$402 in tax. Because he fails to pay by the due date an extra 10% penalty is added. What must he now pay in total?
17. A farm valued at \$2,480,000 sold for 40% below valuation. What did it sell for?
18. A 960 mm length is to be divided into equal sections of a fifth. How long is each section?
19. A table of length 80 cm is to be shortened by 10%. What is the new length?
20. A \$900 television was bought on Hire Purchase. A 20% deposit was required and 28% interest was charged *on the rest* for the hire purchase. What was the full amount paid?

Answers: Basic Percentages and Fractions Practice #3

There are usually many ways of answering these questions (but only one correct answer).

- $0.005 \times 100 = \mathbf{0.5\%}$
- $4 \div 90 = 0.0444 = \mathbf{4.44\%}$ (do not round to a whole number)
- $8\% = \frac{8}{100} = \frac{2}{25}$
- $\frac{105}{100} \times 75 = \mathbf{78.75}$
- $\frac{25}{40} = 0.625 = \mathbf{62.5\%}$
- $\frac{60}{100} \times 11562 = \mathbf{\$6,937.20}$
- $\frac{3}{10}$ left ; $\frac{3}{10} \times 12\frac{2}{5} = 3\frac{18}{25}$ (or 0.3×12.4) = $3\frac{18}{25}$ or $\mathbf{3.72}$ tonnes
- $\frac{25}{100} \times 388 = \97 Take that from \$388 You are left with $\mathbf{\$291}$
- $\frac{5}{9} \times 1.2 = \mathbf{0.6667}$ or $\frac{2}{3}$
- $\frac{25}{100} \times 200 = 50$ Add that to original 200. That gives $\mathbf{250}$ ml
- \$500 increase. $\frac{\text{change}}{\text{start}} = \frac{500}{2000} = 0.25 = \mathbf{25\%}$
- $\frac{2}{3} = \$1700$, so $\frac{1}{3} = \$850$ price $3 \times \frac{1}{3} = 3 \times 850 = \mathbf{\$2,550}$
- \$20 decrease. $\frac{\text{change}}{\text{start}} = \frac{20}{80} = 0.25 = \mathbf{25\%}$ reduction
- $\frac{3}{4} \times 28 = \mathbf{21}$ trucks
- $\frac{187}{203} = 0.92118 = \mathbf{92.1\%}$
- $\frac{10}{100} \times 402 = 40.2$ Add that to original 402 That gives $\mathbf{\$442.20}$
(round money to the cent, so **not** \$442.2)
- $\frac{40}{100} \times \$2,480,000 = 992,00$ Take that from start value. Sale price is $\mathbf{\$1,488,000}$
- $\frac{1}{5} \times 960 = \mathbf{192}$ mm
- $\frac{10}{100} \times 80 = 8$ Take that from start value. That gives $\mathbf{72}$ cm
- $\frac{20}{100} \times 900 = \180 . So the 28% is charged on $900 - 180 = \$720$
 $\frac{28}{100} \times 72201.60$ Add this interest to price, including deposit
Full amount is $\mathbf{\$1,101.60}$