

## Basic Percentages and Fractions Practice #2

1. What is 0.03 as a percentage?
2. What is 0.004 as a fraction?
3. What is  $\frac{3}{5}$  of 240?
4. What is 12% of 9400?
5. Jamie scores 63 out of 80 in a test, what is his % mark? (round to the nearest whole)
6. Judd eats  $\frac{3}{8}$  of the pizza, what has he eaten as a percentage?
7. Cameron sees a shirt at \$94.99, which is marked "20% off", what will it cost him?
8. Anna spends 23 minutes of an hour long period talking, what % is this?
9. Hannah studies for two hours a night. She wants to spend at least one third of her study time doing maths. How much must she spend on Maths?
10. Megan is given \$2,500, and decides to blow a quarter of it on a party. How much money does she have left after the party?
11. Jared has worked 25 minutes of his 3 hour detention. What percentage is this?
12. Petra wants to score over 60% in a test with 20 questions. How many must she get right?
13. Chris has \$440 in the bank. Over the year he is paid 8% interest. How much does he have at the end of the year?
14. Jack sees a desk for sale for \$250, then realises that this does not include the GST. What will it actually cost? (GST is 15% tax added to retail sales)
15. Bob eats  $\frac{1}{5}$  and Dan eats  $\frac{1}{4}$  of a packet of biscuits. What fraction is left?
16. Lucia scores 27 out of 36 right. What is this as the simplest fraction?
17. Julia claims that "1 in 12" people are left-handed, and Kerry claims that 10% of people are left-handed. Which one is claiming more people are left-handed?
18. Ben sees an item that has been "marked down" from \$95 and is now \$76. The salesman claims this is "a quarter off". Is he right?
19. Fraser eats  $\frac{1}{4}$  of the biscuits, then Adam eats  $\frac{1}{2}$  of what remains. What fraction is left?
20. Petrol drops from \$2.13 a litre to \$1.95 a litre, what is the decrease as a %?

## Answers: Basic Percentages and Fractions Practice #2

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

- $0.03 \times 100 = 3\%$
- $0.004 = \frac{4}{1000} = \frac{1}{250}$
- $\frac{3}{5} \times 240 = 144$
- $\frac{12}{100} \times 9400 = 1,128$
- $63 \div 80 = 0.7875$      **Answer = 79%**
- $\frac{3}{8} = 3 \div 8 = 0.375$ .     **Answer = 37.5%**
- 20% of \$94.99 =  $\frac{20}{100} \times \$94.99 = \$18.998$ . Deduct from \$94.99. **Answer = \$75.99**  
(Alternatively taking 20% from 100% leaves 80%. 80% of \$94.99 = 75.99)
- 23 out of 60 =  $\frac{23}{60} = 23 \div 60 = 0.38333$ .     **Answer = 38.33 %**
- $\frac{1}{3}$  of 120 minutes =  $\frac{1}{3} \times 120 = 40$      **Answer = 40 minutes (or  $\frac{2}{3}$  hour)**
- After  $\frac{1}{4}$  is taken,  $\frac{3}{4}$  remains.  $\frac{3}{4} \times 2500 = 1875$ .     **Answer = \$1,875**
- $\frac{25}{180} = 25 \div 180 = 13.8888$      **Answer = 13.9%**
- 60% of 20 =  $\frac{60}{100} \times 20 = 12$ .     **Answer = she must get more than 12 right**
- 8% of \$440 =  $\frac{8}{100} \times 440 = \$35.2$ . Add to original \$440.     **Answer = \$475.20**
- 15% of \$250 =  $\frac{15}{100} \times \$250 = \$37.50$ . Add to \$250.     **Answer = \$287.50**  
(Alternatively adding 15% means the price becomes 115% of the original)
- 1 whole minus fractions eaten =  $1 - \frac{1}{5} - \frac{1}{4} = \frac{11}{20}$ .     **Answer =  $\frac{11}{20}$**
- $\frac{27}{36} = \frac{3}{4}$      **Answer =  $\frac{3}{4}$**
- "1 in 12" =  $\frac{1}{12} = 1 \div 12 = 0.083$ . This is smaller than 10% = 0.100. **Answer = Julia**
- \$95 - \$76 = \$19 change.  $\frac{19}{95} = 19 \div 95 = 0.2 = 20\%$ . "A quarter off" is  $\frac{1}{4} = 0.25 = 25\%$ , which is more.     **Answer = the salesman is wrong**
- $\frac{3}{4}$  is left after Fraser eats  $\frac{1}{4}$ . We want half of that,  $\frac{1}{2}$  of  $\frac{3}{4} = \frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$
- \$2.13 - \$1.95 = \$0.18 decrease. As fraction of start price =  $\frac{0.18}{2.13} = 0.0845 = 8.45\%$