## **Basic Percentages and Fractions Practice #1**

- 1. What is 0.4 as a percentage?
- 2. What is  $\frac{3}{4}$  as a percentage?
- 3. What is 78% as a fraction?
- 4. What is  $\frac{15}{35}$  as the simplest fraction?
- 5. What is  $\frac{3}{8}$  of 44?
- 6. What is 55% of 250?
- 7. Four out of every 100 people are colour-blind, what is that as a percentage?
- 8. Alex scores 16 out of 25 in a test, what is his % mark?
- 9. Billy eats  $\frac{3}{8}$  of the pizza, what fraction is left?
- 10. Abby, Brianny and Courtney want to buy a car together. Abby has  $\frac{3}{8}$  of the amount, Brianny has  $\frac{1}{3}$  and Courtney  $\frac{1}{4}$ . Do they have enough in total?
- 11. There are 12 boys and 15 girls in a class. What percentage are boys?
- 12. In a town of 220,000 people, 12% are immigrants. How many people is that?
- 13. What is 44% of 232?
- 14. Increase 400 by 20%.
- 15. Deduct 35% from 350.
- 16. Ethan spends 43 minutes of an hour long period talking, what % is this?
- 17. Louie sees a shirt at \$95, which is marked "20% off", what will it cost him?
- 18. Cameron pays \$220 rent a week. His landlord says that he is putting it up by 5% extra next year. How much will it become?
- 19. Patrick needs to space out posts along his deck, and decides he would like to do it in four equal spans. The deck is 6.5 metres long. What is the size of each span?
- 20. If Hayden's wages rise from \$950 a week to \$975 a week, what was his % pay rise?



## **Answers: Basic Percentages and Fractions Practice #1**

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

1. 
$$0.4 \times 100 = 40\%$$

2. 
$$\frac{3}{4} = 3 \div 4 = 0.75$$
.  $0.75 \times 100 = 75\%$ 

3. 
$$78\% = \frac{78}{100} = \frac{39}{50}$$

4. 15 out of 35 = 
$${}^{15}/_{35} = {}^{3 \times 5}/_{7 \times 5} = \frac{3}{7}$$

5. 
$$\frac{3}{8} \times 44 = 16.5$$

6. 55% of 250 = 
$$^{55}/_{100} \times 250 = 137.5$$

7. 4 out of 
$$100 = \frac{4}{100} = 0.04$$
 0.04 × 100 = **4%**

8. 16 out of 
$$25 = \frac{16}{25} = 0.64$$
  $0.64 \times 100 = 64\%$ 

9. 
$$1 - \frac{3}{8} = \frac{5}{8}$$
 remaining

10. 
$$\frac{3}{8} + \frac{1}{3} + \frac{1}{4} = \frac{23}{24}$$
 (or 0.375 + 0.3333 + 0.25 = 0.9583).

This is less than 1, so the total is **not enough**.

11. 12 out of 
$$27 = \frac{12}{27} = 0.4444 \cdot 0.4444 \times 100 = 44.44\%$$

12. 12% of 220,000 = 
$$^{12}/_{100} \times 220,000 = 26,400$$
 people.

13. 44% of 232 = 
$$^{44}/_{100} \times 232 = 102.08$$

14. 20% of 
$$400 = {}^{20}/_{100} \times 400 = 80$$
. Add this to original 400 gives **480**

15. 
$$35\%$$
 of  $350 = {}^{35}/_{100} \times 350 = 122.5$ . Subtract this from original 350 gives **227.5**

16. 43 out of 
$$60 = {}^{43}/_{60} = 0.7167$$
  $0.7166 \times 100 = 71.67\%$ 

17. 20% of \$95 = 
$$\frac{20}{100} \times 95 = 19$$
. Subtract this from original 95 = **\$76**

18. 5% of \$220 = 
$$\frac{5}{100} \times 220 = 11$$
. Add this to original 220 = **\$231**

19. 
$$^{1}/_{4}$$
 of 6.5 m =  $^{1}/_{4}$  x 6.5 = **1.625 m**.

20. The rise is \$25 (\$975 - \$950). \$25 change on the **start** \$950 = 
$$^{25}/_{950}$$
 = 0.026316 0.026316  $\times$  100 = **2.63%**

