

Basic Percentages and Fractions Practice #4

1. What is 8% as a fraction?
2. What is 0.02 as a percentage?
3. What is $\frac{13}{40}$ as a percentage?
4. Fill in the missing value: $\frac{5}{8} = \frac{?}{24}$
5. What is sixteen twenty-fourths expressed in its simplest terms?
6. What is 4% of 220?
7. What is two-fifths of 19? Answer in decimal form.
8. A quarter of all New Zealanders were born overseas. What fraction was born in NZ?
9. Two out of every 17 people in NZ identify as being Asian. What is that as a percentage?
10. 2.1% of NZ's total population of 4,600,000 people were born in China. How many people that were born in China are now living in NZ?
11. A 1 Litre carton of milk is three-fifths full. A recipe uses a third of a Litre. What fraction of a Litre is left after the recipe is made?
12. There are 17 diesel utes and 15 petrol utes in a sales yard. What percentage are petrol?
13. 22% of a property of 840 m² is in driveway. What area is the driveway?
14. Increase 860 by 16%.
15. Decrease 55 by 18%.
16. Of the 85 people at a meeting, 58 of them voted in favour of a motion. What percentage voted for the motion?
17. A clothing shop advertised 35% off all stock. What would a suit priced at \$388 now cost?
18. Gary's boss said he would increase his salary of \$42,500 by 15%. What would Gary's new salary be?
19. Isaac wants to divide his fortune of \$4.2 million so that his ten children each get one twelfth, and he will leave the rest to charity. How much does each child get?
20. The population of a small town went from 450 to 467. What was the % change?

Answers: Basic Percentages and Fractions Practice #4

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

1. $8\% = \frac{8}{100} = \frac{2}{25}$

2. $0.02 \times 100 = 2\%$

3. $\frac{13}{40} = 13 \div 40 = 0.325$. $0.325 \times 100 = 32.5\%$

4. $\frac{5}{8} = \frac{15}{24}$ (top and bottom $\times 3$)

5. $\frac{16}{24} = \frac{2}{3}$ (top and bottom $\div 8$)

6. 4% of $220 = \frac{4}{100} \times 220 = 8.8$

7. $\frac{2}{5} \times 19 = \frac{38}{5} = 7.6$

8. $1 - \frac{1}{4} = \frac{3}{4}$ were born in NZ

9. 2 out of 17 = $\frac{2}{17} = 0.117647$ $0.117647 \times 100 = 11.76\%$ (rounded)

10. 2.1% of $4,250,000 = \frac{2.1}{100} \times 4,250,000 = 96,600$ people

11. $\frac{3}{5} - \frac{1}{3} = \frac{4}{15}$ remaining

12. 15 out of total of 32 = $\frac{15}{32} = 0.46875$ $0.46875 \times 100 = 46.9\%$ (rounded)

13. 22% of $840 = \frac{22}{100} \times 840 = 184.8 \text{ m}^2$

14. 16% of $860 = \frac{16}{100} \times 860 = 137.6$. Add this to original 860 gives **997.6**

15. 18% of $55 = \frac{18}{100} \times 55 = 9.9$. Subtract this from original 55 gives **45.1**

16. 58 out of $85 = \frac{58}{85} = 0.68235$ $0.68235 \times 100 = 68.2\%$ (rounded)

17. 35% of $\$388 = \frac{35}{100} \times 388 = 135.8$. Subtract this from original $388 = \mathbf{\$252.20}$

18. 15% of $\$42,500 = \frac{15}{100} \times 42,500 = 6375$. Add this to original $42,500 = \mathbf{\$48,875}$

19. $\frac{1}{12}$ of $\$4.2$ million = $\frac{1}{12} \times 4,200,000 = \mathbf{\$350,000}$ each

20. The rise is 17 ($\$467 - \450). 16 change on the start $\$450 = \frac{17}{450} = 0.037777$
 $0.037777 \times 100 = 3.778\%$ increase