FRACTIONS, DECIMALS, PERCENTAGES

Task 1

1) Write one quarter as a fraction, decimal and a percentage.

$$\frac{1}{4} = 0.25 = 25\%$$

2) Write one half as a fraction, decimal and a percentage.

$$\frac{1}{2} = 0.5 = 50\%$$

3) Write three quarters as a fraction, decimal and a percentage.

$$\frac{3}{4} = 0.75 = 75\%$$

4) Write one whole as a fraction, decimal and a percentage.

$$1 = 1.0 = 100\%$$

5) Write one tenth as a fraction, decimal and a percentage.

$$\frac{1}{10} = 0.1 = 10\%$$

Task 2 – For each of the following, write the fractions in simplest form.

6) Write 0.6 as a fraction and a percentage.

$$0.6 = \frac{3}{5} = 60\%$$

7) Write 0.2 as a fraction and a percentage.

$$0.2 = \frac{1}{5} = 20\%$$

8) Write 0.4 as a fraction and a percentage.

$$0.4 = \frac{2}{5} = 40\%$$

9) Write 0.75 as a fraction and a percentage.

$$0.75 = \frac{3}{4} = 75\%$$

10) Write 0.125 as a fraction and a percentage.

$$0.125 = \frac{1}{8} = 12.5\%$$

11) Write 0.8 as a fraction and a percentage.

$$0.8 = \frac{4}{5} = 80\%$$

12) Write 0.05 as a fraction and a percentage.

$$0.05 = \frac{1}{20} = 5\%$$

13) Write 0.3 as a fraction and a percentage.

$$0.3 = \frac{3}{10} = 30\%$$

Task 3

14) Write $\frac{3}{5}$ as a decimal and a percentage.

$$\frac{3}{5} = 0.6 = 60\%$$

15) Write $\frac{2}{3}$ as a decimal (to 3 decimal places) and a percentage (to 1 decimal place).

$$\frac{2}{3} = 0.667 = 66.7\%$$

16) Write $\frac{1}{7}$ as a decimal (to 3 decimal places) and a percentage (to 1 decimal place).

$$\frac{1}{7} = 0.143 = 14.3\%$$

17) Write $\frac{5}{10}$ as a decimal and a percentage.

$$\frac{5}{10} = 0.5 = 50\%$$

18) Write $\frac{7}{9}$ as a decimal (to 3 decimal places) and a percentage (to 1 decimal place).

$$\frac{7}{9} = 0.778 = 77.8\%$$

19) Write $\frac{7}{10}$ as a decimal and a percentage.

$$\frac{7}{10} = 0.7 = 70\%$$

20) Write $\frac{9}{10}$ as a decimal and a percentage.

$$\frac{9}{10} = 0.9 = 90\%$$

21) Write $\frac{5}{8}$ as a decimal and a percentage.

$$\frac{5}{8} = 0.625 = 62.5\%$$

Task 4 – For each of the following, write the fractions in simplest form.

22) Write 15% as a decimal and a fraction.

$$15\% = 0.15 = \frac{3}{20}$$

23) Write 1% as a decimal and a fraction.

$$1\% = 0.01 = \frac{1}{10}$$

24) Write 27% as a decimal and a fraction.

$$27\% = 0.27 = \frac{27}{100}$$

25) Write 80% as a decimal and a fraction.

$$80\% = 0.8 = \frac{4}{5}$$

26) Write 37.5% as a decimal and a fraction.

$$37.5\% = 0.375 = \frac{3}{8}$$

27) Write 88% as a decimal and a fraction.

$$88\% = 0.88 = \frac{22}{25}$$

28) Write 250% as a decimal and a fraction.

$$250\% = 2.50 = 2\frac{1}{2}$$

29) Write 110% as a decimal and a fraction.

$$110\% = 1.1 = 1\frac{1}{10}$$

Task 5 – List the following numbers in ascending order.

30) $0.5, 60\%, \frac{1}{4}$

$$\frac{1}{4}, 0.5, 60\%$$

31) $\frac{1}{3}, 33\%, 0.3$

$$0.3, 33\%, \frac{1}{3}$$

32) $90\%, \frac{7}{8}, 0.85$

$$0.85, \frac{7}{8}, 90\%$$

33) $\frac{3}{4}, \ 70\%, \ 0.8, \ 0.755, \ \frac{19}{25}$

$$70\%, \frac{3}{4}, 0.755, \frac{19}{25} \ 0.8$$

34) $\frac{1}{5}, 0.15, 25\%, 0.205, \frac{2}{7}$

$$0.15, \frac{1}{5}, 0.205, 25\%, \frac{2}{7}$$

Task 6

35) Fred saves 15% of his monthly pay. He spends $\frac{3}{4}$ on expenses and bills. The rest is his leftover spending money.

a. What percentage of his pay does Fred spend on expenses and bills?

$$\frac{3}{4} = 75\%$$

b. What percentage of his pay does Fred have left for spending?

$$15\% + 75\% = 90\%$$
$$100\% - 90\% = 10\%$$

He has 10% left for spending.

36) Jasmine has a monthly budget for her office. She saves 5% of the budget. She spends $\frac{4}{5}$ of the budget on rent. The rest is for miscellaneous office supplies.

a. What percentage is left for miscellaneous office supplies?

$$5\% + 80\% = 85\%$$
$$100\% - 85\% = 15\%$$

15% is left for office supplies.

b. Write your answer to part a, as a decimal equivalent.

$$15\% = \mathbf{0.15}$$