

Level 3 Maths Revision - Fractions, decimals and percentages

A: Converting percentages to fractions

Reminder

A percentage can be expressed as a fraction out of 100. Sometimes this fraction can be simplified.

Examples

$$\text{a) } 37\% = \frac{37}{100}$$

$$\text{b) } 48\% = \frac{48}{100} = \frac{24}{50} = \frac{12}{25}$$

$$\text{c) } 9\% = \frac{9}{100}$$

$$\text{d) } 35\% = \frac{35}{100} = \frac{7}{20}$$

Now convert these percentages to fractions, simplifying if possible.

1) 82%

2) 44%

3) 19%

4) 5%

5) 60%

6) 63%

7) 3%

8) 8%

9) 67%

10) 36%

11) 11%

12) 85%

B: Converting fractions to decimals

Reminder

To convert a fraction to a decimal simply divide the numerator (top number) by the denominator (bottom number). You can use a calculator for this work.

Examples

$$\text{a) } \frac{3}{8} = 3 \div 8 = 0.375$$

$$\text{b) } \frac{16}{25} = 16 \div 25 = 0.64$$

$$\text{c) } \frac{37}{50} = 37 \div 50 = 0.74$$

Now convert these fractions to decimals:-

13) $\frac{7}{8}$

14) $\frac{13}{20}$

15) $\frac{36}{75}$

16) $\frac{49}{50}$

17) $\frac{19}{25}$

18) $\frac{46}{50}$

19) $\frac{188}{200}$

20) $\frac{3}{5}$

21) $\frac{45}{75}$

22) $\frac{14}{80}$

23) $\frac{23}{40}$

24) $\frac{57}{150}$

C: Converting decimals to percentages, percentages to decimals and fractions to percentages

Reminder

$$0.78 = 78\%$$

$$0.09 = 9\%$$

$$0.9 = 90\%$$

$$67\% = 0.67$$

$$3\% = 0.03$$

$$70\% = 0.7 \text{ (or } 0.70)$$

Now convert these decimals to percentages: -

25) 0.86

26) 0.8

27) 0.06

28) 0.07

29) 0.83

30) 0.3

And convert these percentages to decimals: -

31) 45%

32) 5%

33) 40%

34) 90%

35) 8%

36) 98%

Now convert these fractions to decimals (see above) and then to percentages: -

37) $\frac{11}{25}$

38) $\frac{2}{5}$

39) $\frac{3}{50}$

40) $\frac{148}{200}$

41) $\frac{9}{10}$

42) $\frac{39}{75}$

Finally copy and complete this table: -

	Percentage	Fraction	Decimal
43)	37%		
44)		$\frac{17}{50}$	
45)			0.04
46)	60%		
47)		$\frac{4}{5}$	
49)			0.2
50)	6%		