

MNU 4-07a

Homework 3

Silver Level

Outcome 1

Changing recurring decimals to fractions

Express the following recurring decimals as fractions...

1 $0.\dot{7}1$

2 $0.2\dot{7}$

3 $0.\dot{1}2$

4 $0.6\dot{3}$

5 $0.\dot{4}8\dot{6}$

6 $0.\dot{8}2\dot{2}$

Outcome 2

Undoing a Percentage increase/decrease

Calculate the following original amounts...

1 10% increase
New cost = £121
Original Price?

2 20% decrease
New cost = £8720
Original Price?

3 15% decrease
New speed = 51 m.p.h.
Original Speed?

4 2% increase
New weight = 306 g
Original Weight?

5 35% increase
New length = 567 cm
Original Length?

6 45% decrease
New area = 6490 m²
Original Area?

Outcome 3 - Expressing one value as a % of the other

1 In a survey by a local café it was found that 41 customers preferred coffee and 9 customers preferred tea. What percentage preferred tea?

3 On the day of a maths exam 3 pupils did not bring a calculator and 117 pupils did. What percentage of pupils forgot to bring a calculator?

2 In a class of 24 there are 15 girls. What percentage of the class are boys?

4 There are 160 S3 pupils choosing a science. 57 of them are choosing Physics, 39 are choosing Biology and the rest are choosing Chemistry. What percentage of S3 pupils are choosing Chemistry?