1. Write the following decimal number as a percent:

0.07

0.07 X 100 = 7%

2. Write the following percent as a decimal number:

143%

143% = = 1.43

3. Write the following decimal number as a fraction and simplify:

0.65

0.65 = =

4. In a survey of adult coffee drinkers, 82% of prefer white coffee and the rest prefer black coffee. What percentage of adults prefer black coffee?

Prefer Black Coffee = 100% - Prefer White Coffee = 100% - 82% = 18%

5. From a recent US census bureau report, the portion of the US population under 18 years old was 0.273. What percentage of the population was under 18 years old?

0.273 x 100% = 27.3%

6. Stan allocates 15% of his weekly income for rent. If he allocates $150 each week, what is his weekly income?

$150 is the ‘portion’ of the weekly rent allocated to rent, so we need to find ‘base’ or the total amount of weekly income.

Find BASE = PORTION / RATE

$150 (base) / 0.15 (rate) = $1,000

7. A pub began the weekend with 385 litres of Guinness in stock. On a Saturday afternoon during a rugby match it sold 83% of its stock. How many litres of Guinness were sold? Round to the nearest whole number.

385 litres is the ‘base’ or the total amount of Guinness in stock, so we need to find how many litres were sold or the ‘portion’ of Guinness sold.

Find PORTION = BASE x RATE

385 x 0.83 = 320 litres (rounded up to the nearest whole number)

8. Find the markup rate on a table that has a unit cost of £220 and sells for £599. Round to the nearest tenth.

Markup value = Selling Price – Unit Cost = £599 - £220 = £379

Markeup Rate = x 100 = x 100 = 1.722727 x 100 = 172.2727 = 172.3%

9. A filing cabinet costs £145 and sells for £197.20. Find the markup rate.

Markup value = Selling Price – Unit Cost = £197.20 - £145 = £52.20

Markeup Rate = x 100 = x 100 = 0.36 x 100 = 36%

10. A bicycle costs £2,789 and sells for £7,456. Find the markup rate. Round to the nearest tenth.

Markup value = Selling Price – Unit Cost = £7,456 - £2,789 = £4,667

Markeup Rate = x 100 = x 100 = 1.673359 x 100 = 167.335% = 167.3%