RATIO-SET-1

1	The ratios of teachers : male students : female students in a school are 2 : 17 : 18. The total number of **students** is 665. Find the number of **teachers**. *Answer* .... [2]
2	A company makes two models of television. Model A has a rectangular screen that measures 44 cm by 32 cm. Model B has a larger screen with these measurements increased in the ratio 5:4. **(a)** Work out the measurements of the larger screen. *Answer(a)* .... cm by .... cm [2] **(b)** Find the **fraction** $\dfrac{\text{model } A \text{ screen area}}{\text{model } B \text{ screen area}}$ in its simplest form. *Answer(b)* .... [1]

3	Two similar vases have heights which are in the ratio $3:2$.

(a) The volume of the larger vase is $1080\,\text{cm}^3$.
Calculate the volume of the smaller vase.

Answer(a) .... cm^3 [2]

(b) The surface area of the smaller vase is $252\,\text{cm}^2$.
Calculate the surface area of the larger vase.

Answer(b) .... cm^2 [2] |
| | |
| 4 | Pedro and Eva do their homework.
Pedro takes 84 minutes to do his homework.

The ratio   Pedro's time : Eva's time $= 7:6$.

Work out the number of minutes Eva takes to do her homework.

Answer .... min [2] |
| | |
| 5 | Ahmed and Babar share $240\,\text{g}$ of sweets in the ratio $7:3$.

Calculate the amount Ahmed receives.

Answer .... g [2] |
| | |

6	Martha divides $240 between spending and saving in the ratio spending : saving = 7 : 8 . Calculate the amount Martha has for spending. *Answer* $ .... [2]

7	Pip and Ali share $785 in the ratio Pip : Ali = 4 : 1. Work out Pip's share. *Answer* $ .... [2]

8	Ralf and Susie share $57 in the ratio 2 : 1. **(a)** Calculate the amount Ralf receives. $ .... [2] **(b)** Ralf gives $2 to Susie. Calculate the new ratio Ralf's money : Susie's money. Give your answer in its simplest form. .... : ....[2]