

### Question from Uriel 10.06.13

Mr Gordan's shop sold bicycle wheel sets and frames. The ratio of the price of a wheel set to that of a frame was 2:7. The price of a **frame costs \$125 more** than that of a wheel set. Mr Gordon sold all the items and collected \$34 200. The ratio of the number of **wheel sets** sold to the number of **frames** sold was **5:2**. Find the total number of frames at first?

### Solution:

$$7 - 2 = 5 \text{ units}$$

$$5 \text{ units} \rightarrow \$125$$

$$1 \text{ unit} \rightarrow \$25$$

$$2 \text{ units} \rightarrow \$50$$

$$7 \text{ units} \rightarrow \$175$$

$$1 \text{ group} \rightarrow 5 \text{ wheel sets} + 2 \text{ frames} = \$50 \times 5 + \$175 \times 2 = \$600$$

$$\text{Number of groups} \rightarrow \$34\,200 \div \$600 = 57$$

Since there are 2 frames in each group,

$$\text{Total number of frames} \rightarrow 57 \times 2 = 114$$

**Ans: There are 114 frames altogether.**