



# Simplifying Ratios

1. Write each of the following ratios in their simplest form:

a. 4:2

b. 12:4

c. 10:15:35

2. Find the odd one out:

a. 7:5, 21:15, 10:14, 49:35

b. 12:27, 16:45, 4:9, 36:81

c. 2:5, 5:15, 10:25, 4:10

3. Answer the word problems:

a. A shop sells thirty different flavours of ice cream and five different sauces. Write the ratio of ice cream flavours to sauces, giving your answer in its simplest form.

b. A local council are planting flowers in the centre of each roundabout. Each roundabout will have 80 daffodils, 65 tulips and 100 pansies. Write the ratio of daffodils to tulips to pansies, giving your answer in its simplest form.

c. A pet shop has 12 budgies, 8 canaries and 16 finches. Jim says the ratio of budgies to canaries to finches in its simplest form is 3:4:2. Show that Jim is incorrect and identify the mistake he has made.

d. In a secondary school of 1200 pupils, there are 500 pupils in KS3 and 150 pupils in KS5. Write the ratio of KS3 to KS4 to KS5 pupils. Give your answer in its simplest form.



# Simplifying Ratios **Answers**

1. Write each of the following ratios in their simplest form:

a. 4:2

**2:1**

b. 12:4

**3:1**

c. 10:15:35

**2:3:7**

2. Find the odd one out:

a. 7:5, 21:15, 10:14, 49:35

**10:14**

b. 12:27, 16:45, 4:9, 36:81

**16:45**

c. 2:5, 5:15, 10:25, 4:10

**5:15**

3. Answer the word problems:

a. A shop sells thirty different flavours of ice cream and five different sauces. Write the ratio of ice cream flavours to sauces, giving your answer in its simplest form.

**30:5 = 6:1**

b. A local council are planting flowers in the centre of each roundabout. Each roundabout will have 80 daffodils, 65 tulips and 100 pansies. Write the ratio of daffodils to tulips to pansies, giving your answer in its simplest form.

**80:65:100 = 16:13:20**

c. A pet shop has 12 budgies, 8 canaries and 16 finches. Jim says the ratio of budgies to canaries to finches in its simplest form is 3:4:2. Show that Jim is incorrect and identify the mistake he has made.

**12:8:16 = 3:2:4**

**Jim swapped the ratios of the canaries and finches around.**

d. In a secondary school of 1200 pupils, there are 500 pupils in KS3 and 150 pupils in KS5. Write the ratio of KS3 to KS4 to KS5 pupils. Give your answer in its simplest form.

**Number of KS4 pupils = 1200 - (500 + 150) = 550**

**500:550:150 = 10:11:3**