# Problem 3

Work out the missing number

75 + 13 + ?? = 140

How many teams scored more than 3 goals?

| Team | No. of goals |
|------|------|
| A | 3 |
| B | 5 |
| C | 4 |
| D | 2 |

Express 96 out of 400 as a percentage

The table shows the number of brothers and sisters of the students in year 7.

What percentage of students have more than 1 brother or sister?

Number of brothers and sisters

|  | 1 | 2 | 3 | 4 |  |
|---|---|---|---|---|---|
| Year 7 Male students | 62 |  | 8 |  | 104 |
| Year 7 Female students |  | 24 | 14 |  |  |
|  | 118 |  |  | 6 | 200 |

# Problem 3

| Work out the missing number | How many teams scored more | Express 96 out of 400 as a |
|---|---|---|

**Work out the missing number**

75 + 13 + ?? = 140

**52**

**How many teams scored more than 3 goals?**

| Team | No. of goals |
|---|---|
| A | 3 |
| B | 5 |
| C | 4 |
| D | 2 |

**2 teams**

**Express 96 out of 400 as a percentage**

**24%**

The table shows the number of brothers and sisters of the students in year 7.

What percentage of students have more than 1 brother or sister?

Number of brothers and sisters

| | 1 | 2 | 3 | 4 | |
|---|---|---|---|---|---|
| Year 7 Male students | 62 | 30 | 8 | 4 | 104 |
| Year 7 Female students | 56 | 24 | 14 | 2 | 96 |
| | 118 | 54 | 22 | 6 | 200 |

54+22+6 = 82 students

41%

The table shows the sports chosen by 400 students at a college. What percentage of the students are female who chose either cricket or tennis?

| | Cricket | Football | Tennis | Athletics | |
|---|---|---|---|---|---|
| Male | 44 | | 52 | | 210 |
| Female | | 52 | | 34 | |
| | 100 | | | 80 | |

The table shows the sports chosen by 400 students at a college. What percentage of the students are female who chose either cricket or tennis?

|  | Cricket | Football | Tennis | Athletics |  |
|---|---|---|---|---|---|
| Male | 44 | 68 | 52 | 46 | 210 |
| Female | 56 | 52 | 48 | 34 | 190 |
|  | 100 | 120 | 100 | 80 | 400 |

56 + 48 = 104     104 ÷ 400 × 100 = 26%

The table shows the subjects studied by 150 students. What percentage of the students studied art or history?

|  | History | Art | Technology |  |
|---|---|---|---|---|
| Group A | 6 |  | 24 | 45 |
| Group B |  | 18 | 15 | 54 |
| Group C | 18 |  | 3 |  |
|  |  |  |  | 150 |

The table shows the subjects studied by 150 students. What percentage of the students studied art or history?

| | History | Art | Technology | |
|---|---|---|---|---|
| Group A | 6 | 15 | 24 | 45 |
| Group B | 21 | 18 | 15 | 54 |
| Group C | 18 | 30 | 3 | 51 |
| | 45 | 63 | 42 | 150 |

45 + 63 = 108     108 ÷ 150 × 100 = 72%

www.mathsbox.org.uk

The table shows the TV programmes watched by 800 students. What percentage of the students are in Year 8 or 9 and chose Sport?

|  | Year 7 | Year 8 | Year 9 | Year 10 |  |
|---|---|---|---|---|---|
| Soaps |  | 48 | 80 | 96 |  |
| Sport | 120 |  | 84 |  |  |
| Films |  | 38 | 46 | 20 | 176 |
|  | 220 |  |  | 180 |  |

The table shows the TV programmes watched by 800 students. What percentage of the students are in Year 8 or 9 and chose Sport?

|        | Year 7 | Year 8 | Year 9 | Year 10 |     |
|--------|--------|--------|--------|---------|-----|
| Soaps  | 28     | 48     | 80     | 96      | 252 |
| Sport  | 120    | 104    | 84     | 64      | 372 |
| Films  | 72     | 38     | 46     | 20      | 176 |
|        | 220    | 190    | 210    | 180     | 800 |

104 + 84 = 188    188 ÷ 800 × 100 = 23.5%

www.mathsbox.org.uk

# PROBLEM 3D

The table shows the visitor to an attraction over a bank holiday weekend. What percentage of the visitors are adults who visited on Friday or Monday?

|  | Friday | Saturday | Sunday | Monday |  |
|---|---|---|---|---|---|
| Juniors | 35 | 225 | 125 | 235 |  |
| Adults | 40 |  | 55 |  | 280 |
| Seniors |  | 15 |  | 20 | 100 |
|  | 125 | 320 |  |  |  |

www.mathsbox.org.uk

The table shows the visitor to an attraction over a bank holiday weekend. What percentage of the visitors are adults who visited on Friday or Monday?

|  | Friday | Saturday | Sunday | Monday |  |
|---|---|---|---|---|---|
| Juniors | 35 | 225 | 125 | 235 | 620 |
| Adults | 40 | 80 | 55 | 105 | 280 |
| Seniors | 50 | 15 | 15 | 20 | 100 |
|  | 125 | 320 | 195 | 360 | 1000 |

40 + 105 = 145      145 ÷ 1000 × 100 = 14.5%

The table shows the sports chosen by 400 students at a college. What percentage of the students are female who chose either cricket or tennis?

| | Cricket | Football | Tennis | Athletics | |
|---|---|---|---|---|---|
| Male | 44 | | 52 | | 210 |
| Female | | 52 | | 34 | |
| | 100 | | | 80 | |

The table shows the subjects studied by 150 students. What percentage of the students studied art or history?

| | History | Art | Technology | |
|---|---|---|---|---|
| Group A | 6 | | 24 | 45 |
| Group B | | 18 | 15 | 54 |
| Group C | 18 | | 3 | |
| | | | | 150 |

The table shows the TV programmes watched by 800 students. What percentage of the students are in Year 8 or 9 and chose Sport?

| | Year 7 | Year 8 | Year 9 | Year 10 | |
|---|---|---|---|---|---|
| Soaps | | 48 | 80 | 96 | |
| Sport | 120 | | 84 | | |
| Films | | 38 | 46 | 20 | 176 |
| | 220 | | | 180 | |

The table shows the visitor to an attraction over a bank holiday weekend. What percentage of the visitors are adults who visited on Friday or Monday?

| | Friday | Saturday | Sunday | Monday | |
|---|---|---|---|---|---|
| Juniors | 35 | 225 | 125 | 235 | |
| Adults | 40 | | 55 | | 280 |
| Seniors | | 15 | | 20 | 100 |
| | 125 | 320 | | | |

The table shows the sports chosen by 400 students at a college. What percentage of the students are female who chose either cricket or tennis?

|  | Cricket | Football | Tennis | Athletics |  |
|---|---|---|---|---|---|
| Male | 44 | 68 | 52 | 46 | 210 |
| Female | 56 | 52 | 48 | 34 | 190 |
|  | 100 | 120 | 100 | 80 | 400 |

56 + 48 = 104      104 ÷ 400 × 100 = 26%

The table shows the subjects studied by 150 students. What percentage of the students studied art or history?

|  | History | Art | Technology |  |
|---|---|---|---|---|
| Group A | 6 | 15 | 24 | 45 |
| Group B | 21 | 18 | 15 | 54 |
| Group C | 18 | 30 | 3 | 51 |
|  | 45 | 63 | 42 | 150 |

45 + 63 = 108      108 ÷ 150 × 100 = 72%

The table shows the TV programmes watched by 800 students. What percentage of the students are in Year 8 or 9 and chose Sport?

|  | Year 7 | Year 8 | Year 9 | Year 10 |  |
|---|---|---|---|---|---|
| Soaps | 28 | 48 | 80 | 96 | 252 |
| Sport | 120 | 104 | 84 | 64 | 372 |
| Films | 72 | 38 | 46 | 20 | 176 |
|  | 220 | 190 | 210 | 180 | 800 |

104 + 84 = 188      188 ÷ 800 × 100 = 23.5%

The table shows the visitor to an attraction over a bank holiday weekend. What percentage of the visitors are adults who visited on Friday or Monday?

|  | Friday | Saturday | Sunday | Monday |  |
|---|---|---|---|---|---|
| Juniors | 35 | 225 | 125 | 235 | 620 |
| Adults | 40 | 80 | 55 | 105 | 280 |
| Seniors | 50 | 15 | 15 | 20 | 100 |
|  | 125 | 320 | 195 | 360 | 1000 |

40 + 105 = 145      145 ÷ 1000 × 100 = 14.5%