



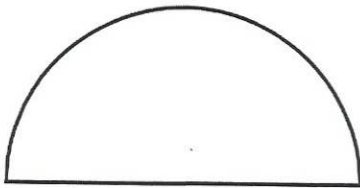
|        | French | German |
|--------|--------|--------|
| Male   | 14     | 6      |
| Female | 12     | 8      |

$$14 + 12 + 6 + 8 = 40$$

A student is selected at random.

What is the probability of the student studying German?

$$\frac{14}{40} = \frac{7}{20}$$



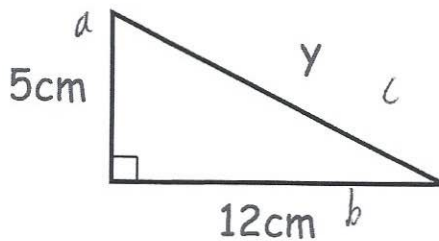
8cm

Calculate the area

$$(\pi \times 4^2) \div 2$$

$$25 \cdot 133 \text{ cm}^2$$

$$\text{or } 8\pi \text{ cm}^2$$



Find y

$$a^2 + b^2 = c^2$$

$$5^2 + 12^2 = y^2$$

$$25 + 144 = y^2$$

$$y^2 = 169$$

$$y = 13 \text{ cm}$$

Complete this table for the graph

$$y = x^2 + 1$$

|   |    |    |   |   |   |
|---|----|----|---|---|---|
| x | -2 | -1 | 0 | 1 | 2 |
| y | 5  | 2  | 1 | 2 | 5 |

$$a = \begin{pmatrix} 2 \\ -1 \end{pmatrix} \quad b = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$$

Work out  $2a + b$  as a column vector

$$2a = \begin{pmatrix} 4 \\ -2 \end{pmatrix} \quad b = \begin{pmatrix} 5 \\ 3 \end{pmatrix}$$

$$2a + b = \begin{pmatrix} 9 \\ 1 \end{pmatrix}$$