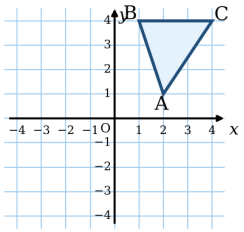
**Day 155** **B Tier 10-a-day**

**1** Simplify 9m + 6n + 6m + 6n

**2** How many lines of symmetry does a regular hexagon have?

**3** A spinner has coloured sections. It is spun 150 times and lands on blue 135 times.
What is the relative frequency of blue?
Give your answer as a decimal.

**4** The diagram shows triangle ABC on a grid.
(a) Write down the coordinates of the image of A after a reflection in the line y = x.
(b) Write down the coordinates of the image of C after a reflection in the line x = 2.




**5** Complete the table of values for $y = x^2 - 3x + 2$

| x | −2 | −1 | 0 | 1 | 2 | 3 |
|---|---|---|---|---|---|---|
| y | 12 | 6 | | | | |

**Day 155** **B Tier 10-a-day**

**6** Work out $(3.7 \times 10^4) \times (6 \times 10^7)$
Give your answer in standard form.

**7** In a test, the mean mark of 20 Class A is 46.
The mean mark of 5 Class B is 51.
Work out the mean mark of all 25 students.

**8** Work out $3\frac{2}{3} + 3\frac{1}{2}$
Give your answer as a mixed number.

**9** Show that $3(2n + 1) + 3(2n + 7)$ is always a multiple of 12, where n is a whole number.

**10** The cumulative frequency graph shows the times taken by 40 students to complete a puzzle.
(a) Use the graph to estimate the median.
(b) Work out an estimate for the interquartile range.

