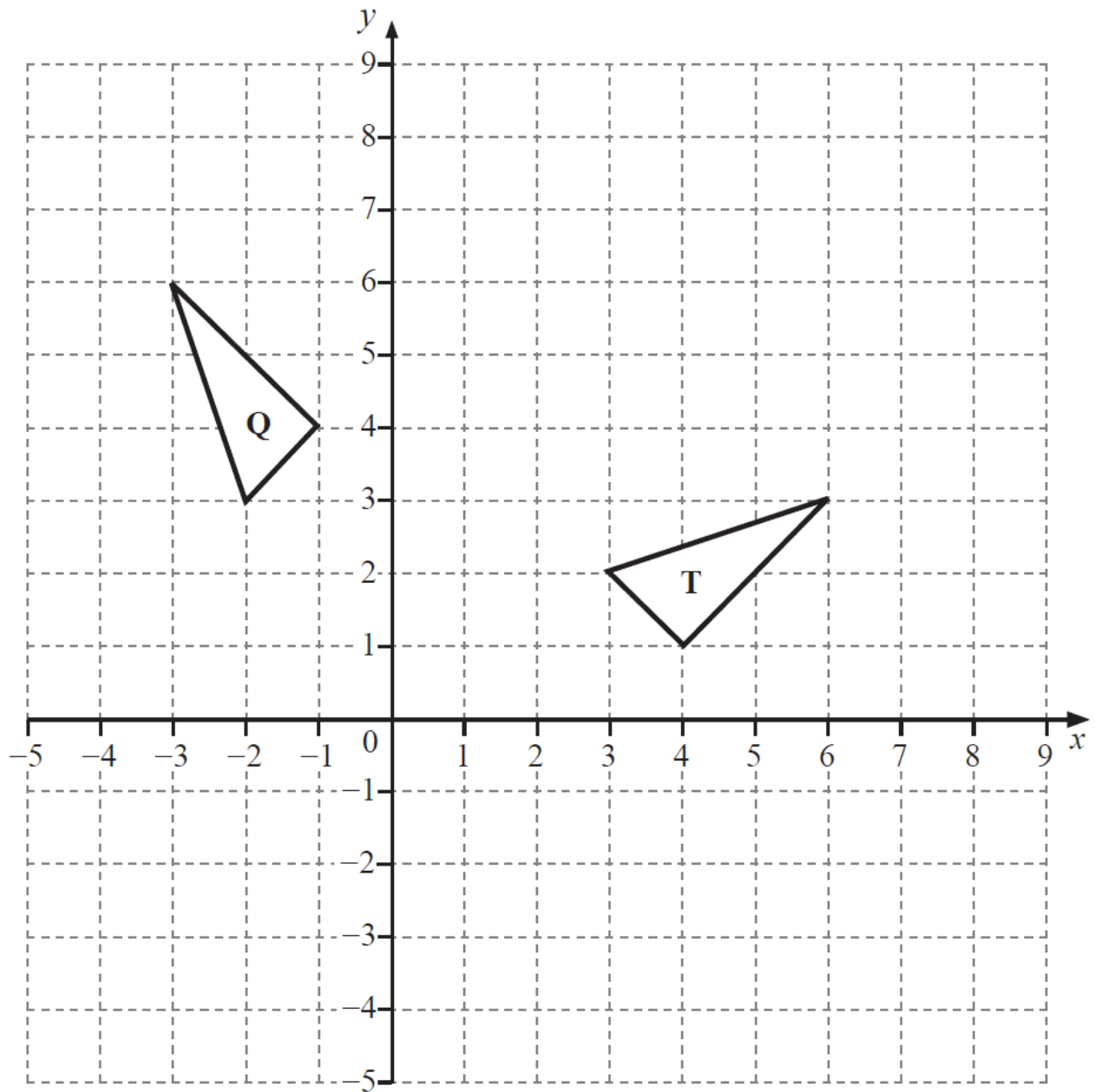


# M6 = 23 days to go!

15



(a) Describe fully the **single** transformation which maps triangle **T** onto triangle **Q**.

Answer \_\_\_\_\_ [3]

(b) On the grid, draw the image of triangle **T** after a translation  $\begin{pmatrix} 2 \\ -5 \end{pmatrix}$ . [2]

**16** A six-sided dice is rolled 800 times.

The table below shows the relative frequency of scoring a six after different numbers of rolls.

| Number of rolls | Relative frequency of a six |
|-----------------|-----------------------------|
| 100             | 0.3                         |
| 200             | 0.26                        |
| 300             | 0.27                        |
| 500             | 0.23                        |
| 800             | 0.25                        |

**(a)** How many times was a six scored after 300 rolls?

Show how you obtained your answer.

Answer \_\_\_\_\_ [2]

**(b)** How many sixes would you expect to get if a **fair** six-sided dice was rolled 300 times?

Answer \_\_\_\_\_ [2]