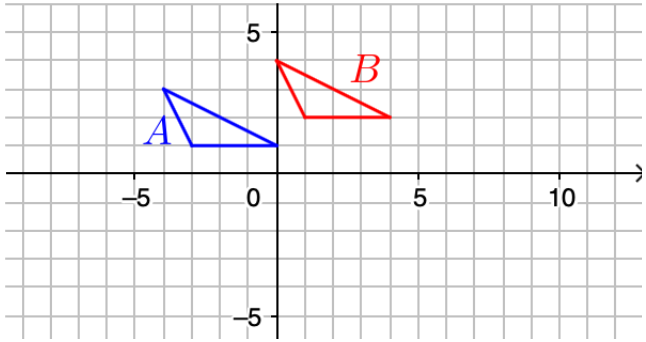
Target 6 Sheet 01A

Question 1

A new car is available in 11 standard and 1 pearl-effect exterior colour options. There are 7 interior colour options, but 2 of these are only available with the pearl-effect exterior. How many colour combinations are there?

Question 2

Describe the transformation that maps A to B.



Question 3

Solve, giving your answers in surd form:

$(x+1)^2 = 15$

Question 4

n is a positive integer. Show that

$4(n+3)+2(n+5)+20$

is always a multiple of 3.

Target 6 Sheet 01A

BossMaths

Question 1

A new car is available in 11 standard and 1 pearl-effect exterior colour options. There are 7 interior colour options, but 2 of these are only available with the pearl-effect exterior. How many colour combinations are there?

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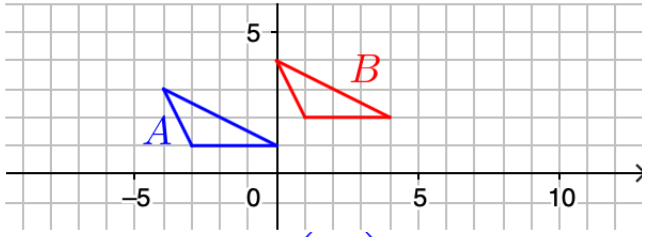
Question 2

Describe the transformation that maps A to B.



Translation by $\begin{pmatrix} 4 \\ 1 \end{pmatrix}$

Question 3

Solve, giving your answers in surd form:

$(x+1)^2 = 15$

$x + 1 = \pm\sqrt{15}$

$x = -1 + \sqrt{15},\ x = -1 - \sqrt{15}$

Question 4

n is a positive integer. Show that

$4(n+3) + 2(n+5) + 20$

is always a multiple of 3.

Simplifying, we obtain $6n + 42$.

We can write it as $3(2n + 14)$.

This is always a multiple of 3.