Tuesday

L.O. Multiply fractions

$$\frac{1}{4} \times \frac{1}{2} =$$

Step 1

If the number is an integer (whole number), then put it over a denominator of 1.

Multiply the numerators together, then multiply the denominators together.

Step 2

You may want to convert the fraction into its simplest form or convert it back to a mixed fraction (if it is an improper fraction).

And that's all you need to do to multiply two fractions together.

Multiply these fractions together. Your answer should be given in simplest form, and written as a proper fraction or mixed number (not as an improper fraction).

1) $\dfrac{2}{5} \times \dfrac{1}{3} =$

2) $\dfrac{4}{7} \times \dfrac{3}{4} =$

3) $\dfrac{3}{8} \times \dfrac{5}{6} =$

4) $\dfrac{3}{9} \times \dfrac{2}{3} =$

5) $\dfrac{5}{6} \times 8 =$

6) $\dfrac{3}{11} \times \dfrac{2}{3} =$

7) $\dfrac{6}{7} \times 5 =$

8) $\dfrac{1}{6} \times \dfrac{8}{9} =$

9) $\dfrac{3}{10} \times \dfrac{4}{5} =$

10) $\dfrac{2}{11} \times \dfrac{3}{8} =$

11) $9 \times \dfrac{5}{7} =$

12) $\dfrac{4}{3} \times \dfrac{3}{10} =$

13) $\dfrac{7}{4} \times \dfrac{8}{9} =$

14) $\dfrac{4}{13} \times \dfrac{3}{5} =$

15) $\dfrac{8}{11} \times 7 =$

16) $\dfrac{8}{3} \times \dfrac{4}{11} =$

17) $13 \times \dfrac{3}{8} =$

18) $\dfrac{5}{14} \times \dfrac{4}{5} =$

19) $\dfrac{7}{11} \times 9 =$

20) $\dfrac{5}{8} \times \dfrac{7}{5} =$

21) $\dfrac{3}{13} \times \dfrac{8}{7} =$

22) $\dfrac{6}{5} \times \dfrac{7}{12} =$

23) $\dfrac{2}{11} \times \dfrac{9}{4} =$

24) $\dfrac{8}{13} \times 12 =$

1) $\dfrac{2}{5} \times \dfrac{1}{3} = \dfrac{2}{15}$

2) $\dfrac{4}{7} \times \dfrac{3}{4} = \dfrac{3}{7}$

3) $\dfrac{3}{8} \times \dfrac{5}{6} = \dfrac{5}{16}$

4) $\dfrac{3}{9} \times \dfrac{2}{3} = \dfrac{2}{9}$

5) $\dfrac{5}{6} \times 8 = 6\dfrac{2}{3}$

6) $\dfrac{3}{11} \times \dfrac{2}{3} = \dfrac{2}{11}$

7) $\dfrac{6}{7} \times 5 = 4\dfrac{2}{7}$

8) $\dfrac{1}{6} \times \dfrac{8}{9} = \dfrac{4}{27}$

9) $\dfrac{3}{10} \times \dfrac{4}{5} = \dfrac{6}{25}$

10) $\dfrac{2}{11} \times \dfrac{3}{8} = \dfrac{3}{44}$

11) $9 \times \dfrac{5}{7} = 6\dfrac{3}{7}$

12) $\dfrac{4}{3} \times \dfrac{3}{10} = \dfrac{2}{5}$

13) $\dfrac{7}{4} \times \dfrac{8}{9} = 1\dfrac{5}{9}$

14) $\dfrac{4}{13} \times \dfrac{3}{5} = \dfrac{12}{65}$

15) $\dfrac{8}{11} \times 7 = 5\dfrac{1}{11}$

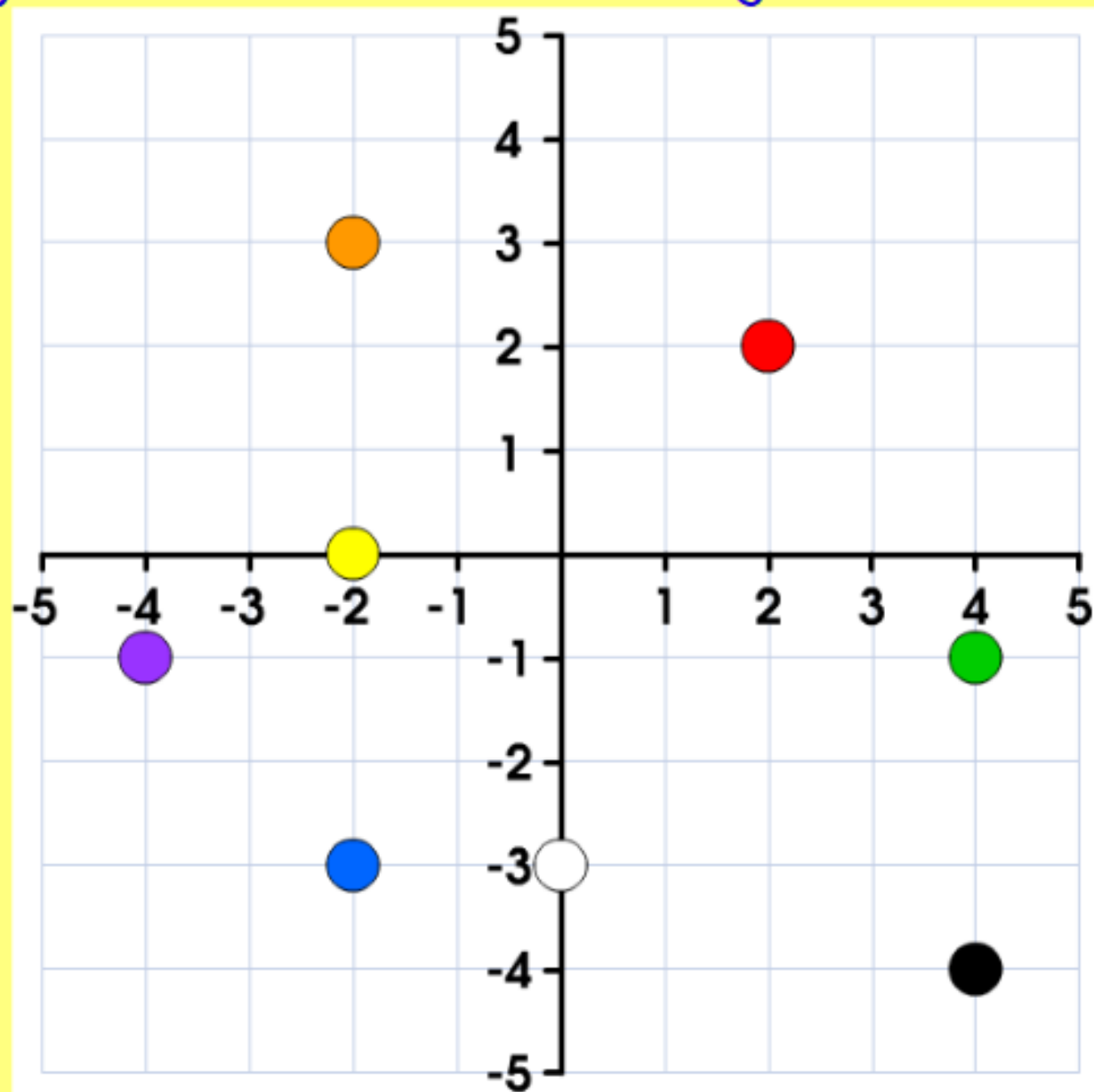16) $\dfrac{8}{3} \times \dfrac{4}{11} = \dfrac{32}{33}$

17) $13 \times \dfrac{3}{8} = 4\dfrac{7}{8}$

18) $\dfrac{5}{14} \times \dfrac{4}{5} = \dfrac{2}{7}$

19) $\dfrac{7}{11} \times 9 = 5\dfrac{8}{11}$

20) $\dfrac{5}{8} \times \dfrac{7}{5} = \dfrac{7}{8}$

21) $\dfrac{3}{13} \times \dfrac{8}{7} = \dfrac{24}{91}$

22) $\dfrac{6}{5} \times \dfrac{7}{12} = \dfrac{7}{10}$

23) $\dfrac{2}{11} \times \dfrac{9}{4} = \dfrac{9}{22}$

24) $\dfrac{8}{13} \times 12 = 7\dfrac{5}{13}$

L.O. Translate shapes on a co-ordinate grid.

How do you read co-ordinates on a grid with four quadrants?

L.O. Translate shapes on a co-ordinate grid.

What is a translation?

The length of sides and sizes of angles are unchanged;

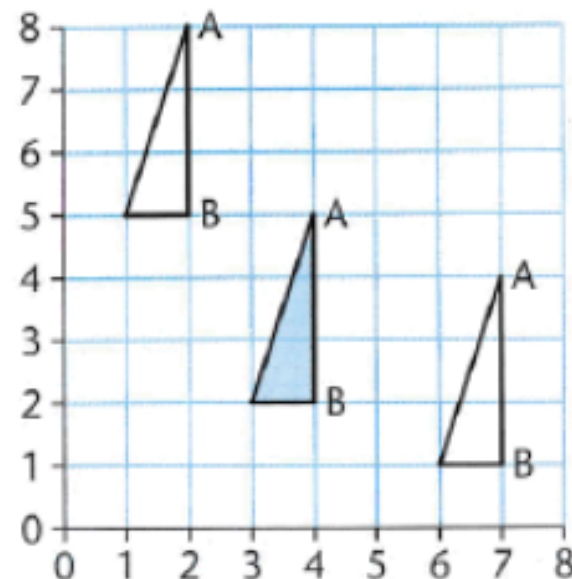orientation of the shape is unchanged;

position is changed.

(It means to slide a shape into a new position).

Translate the blue triangle:

① Left 2 Up 3

②

The shape is not rotated (turned).

Each line of the translated shape is parallel to the equivalent line in the original shape.
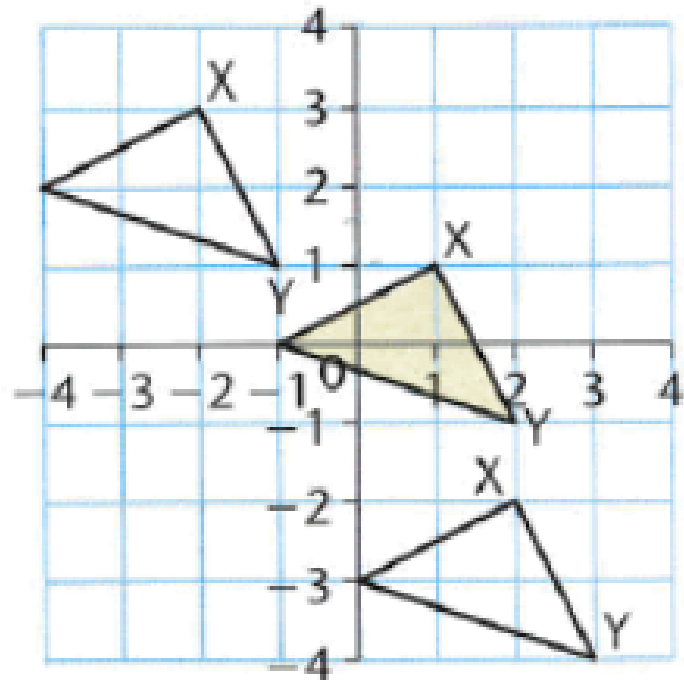
AB is parallel to the y axis in the blue triangle and in both translations.

L.O. Translate shapes on a co-ordinate grid.

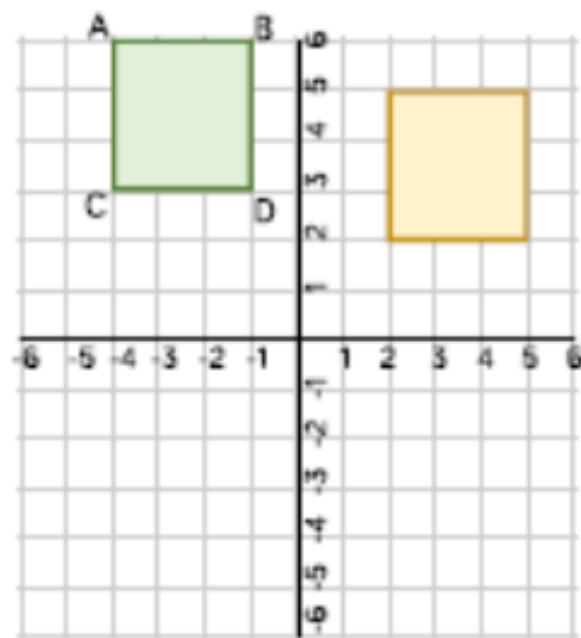Translate the yellow triangle:

3 ████████

4 ████████

The shape is not rotated (turned).

Each line of the translated shape is parallel to the equivalent line in the original shape.

XY in the yellow triangle is parallel to XY in each translation.

True or false?

Sam has translated the square ABCD 6 units down and 1 unit to the right to get to the yellow square.
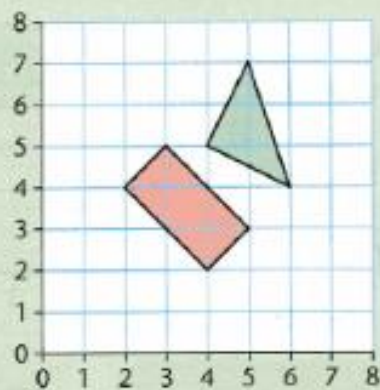

Explain your reasoning.

Spot the mistake.

The green triangle has been translated 6 units to the left and 3 units down.

L.O. Translate shapes on a co-ordinate grid.

A

1 Copy the grid and the triangle.
Translate the triangle:

a) Left 2 Down 3

b) Right 1 Down 2

c) Left 4 Up 1

2 Copy the grid and the rectangle.
Translate the rectangle:

a) Right 2 Up 3

b) Left 2 Down 1

c) Right 3 Down 2

3 Draw a new grid. Plot these co-ordinates and join them up in the order given.
(2, 5) (3, 6) (5, 5) (4, 4) (2, 5)

Translate the parallelogram:

a) Left 2 Down 2

b) Right 3 Up 2

c) Right 1 Down 4

4 Draw a new grid. Plot these co-ordinates and join them up in the order given.
(2, 2) (2, 4) (3, 4) (3, 3)
(5, 3) (5, 2) (2, 2)
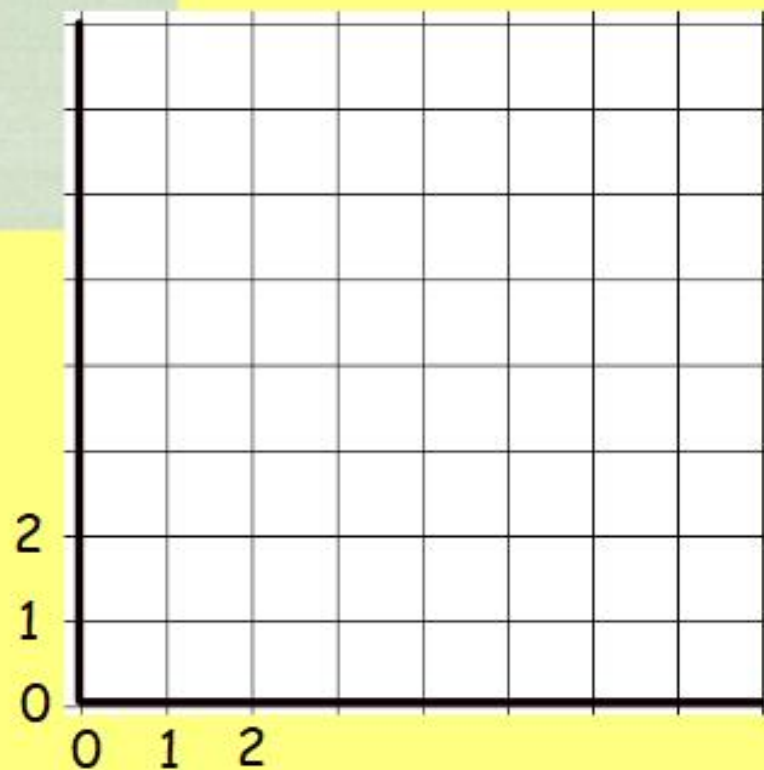
Translate the hexagon:

a) Left 2 Down 2

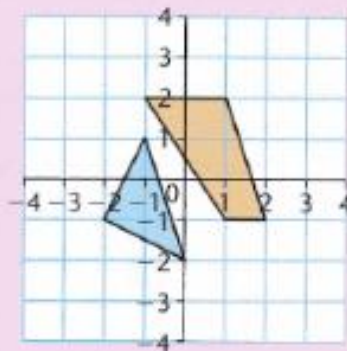b) Right 3 Up 3

c) Left 1 Up 4

TYM Page 134 & 135
Tri Sec A & B
Pen Sec B & C
Hex Sec C

L.O. Translate shapes on a co-ordinate grid.

B

5 Draw a new grid.
Plot these co-ordinates and join them up in the order given.
(−1, 2) (0, 0) (−1, −2) (−2, 0) (−1, 2)

6 Translate the rhombus:
a) Right 4 Up 1
b) Left 2 Up 2
c) Right 3 Down 2

TYM Page 134 & 135
Tri Sec A
Pen Sec B
Hex Sec C
Ext 133 C

1 Copy the grid and the trapezium.
Translate the trapezium:
a) Left 2 Down 2
b) Left 3 Up 2
c) Right 2 Down 3

2 Copy the grid and the triangle.
Translate the triangle:
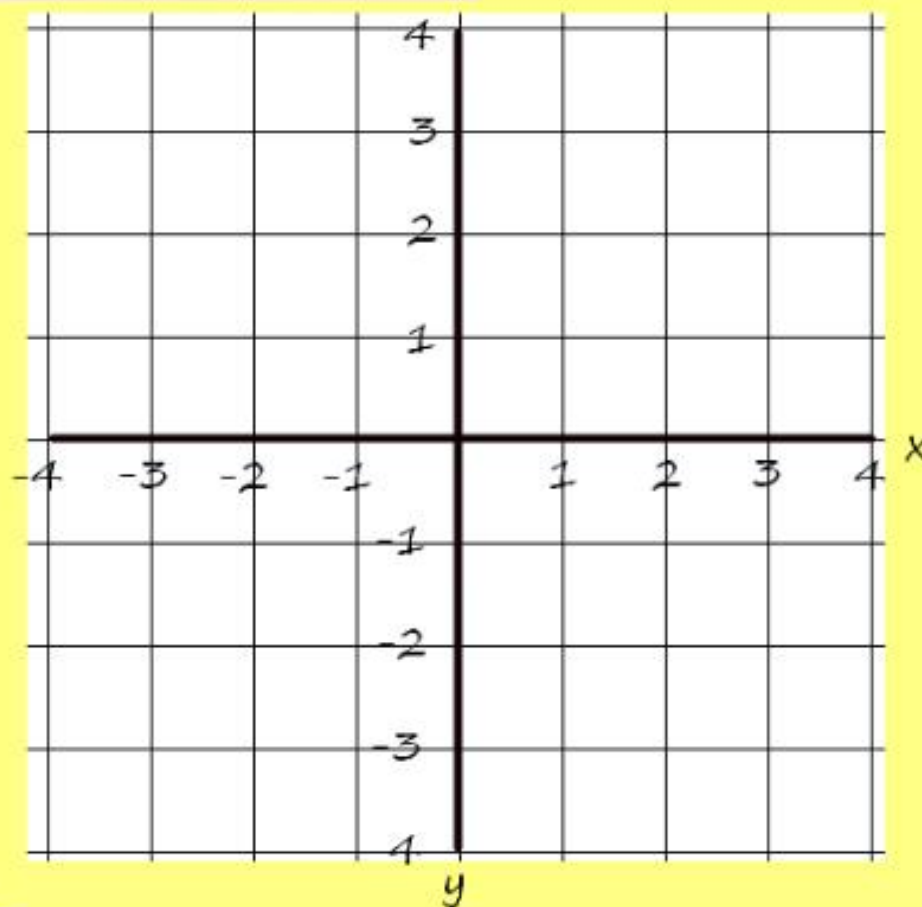a) Right 3 Up 2
b) Left 1 Up 3
c) Right 4 Down 2

3 Draw a new grid.
Plot these co-ordinates and join them up in the order given.
(−1, 0) (0, 2) (2, 1) (1, −1) (−1, 0)

4 Translate the square:
a) Left 2 Down 3
b) Left 3 Up 1

L.O. Translate shapes on a co-ordinate grid.

C

For each of the following draw a grid with both x and y axes labelled from -6 to 6. Plot the co-ordinates and join them up in the order given to form a shape.

1 $(-4, -3)$ $(-2, -1)$ $(-3, 0)$ $(0, 0)$ $(0, -3)$ $(-1, -2)$ $(-3, -4)$ $(-4, -3)$

Translate the heptagon:

a) Right 4 Up 4

b) Left 2 Up 5

c) Right 6 Down 2

2 $(2, 4)$ $(2, 2)$ $(4, 2)$ $(1, -1)$ $(1, 1)$ $(-1, 1)$ $(2, 4)$

Translate the hexagon:

a) Left 3 Down 4

b) Left 4 Up 2

c) Right 2 Down 5

3 $(3, -3)$ $(0, -2)$ $(-1, -4)$ $(0, 0)$ $(3, -3)$

Translate the quadrilateral:

a) Right 2 Up 5

b) Left 3 Up 6

c) Left 5 Down 2

4 $(-3, 2)$ $(-1, 4)$ $(-1, 2)$ $(1, 1)$ $(-1, 0)$ $(-3, 2)$

Translate the pentagon:

a) Right 4 Up 1

b) Left 3 Down 3

c) Right 5 Down 6

5 $(-1, -1)$ $(-2, 3)$ $(1, 2)$ $(-1, -1)$

Translate the triangle:

a) Right 5 Down 4

b) Right 4 Up 3
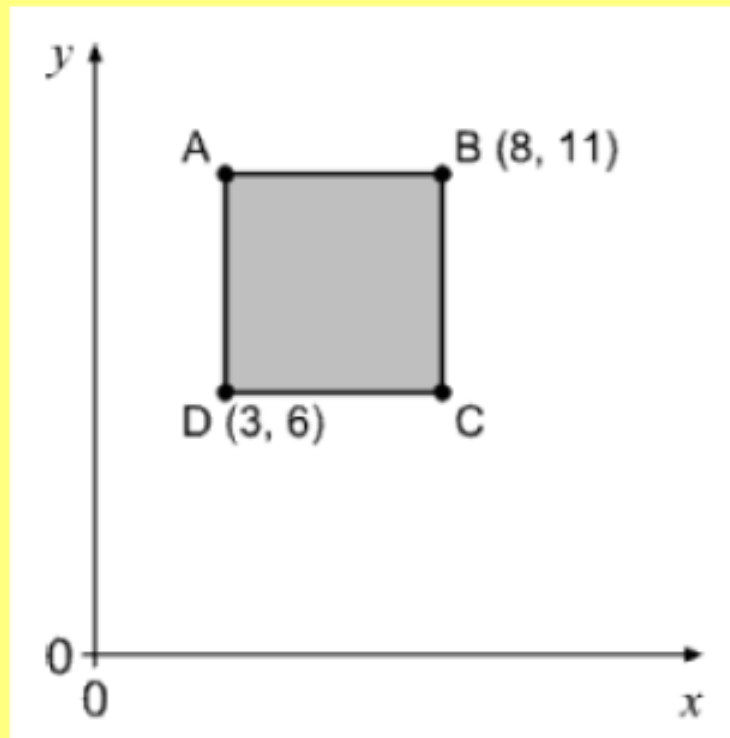
c) Left 2 Down 5

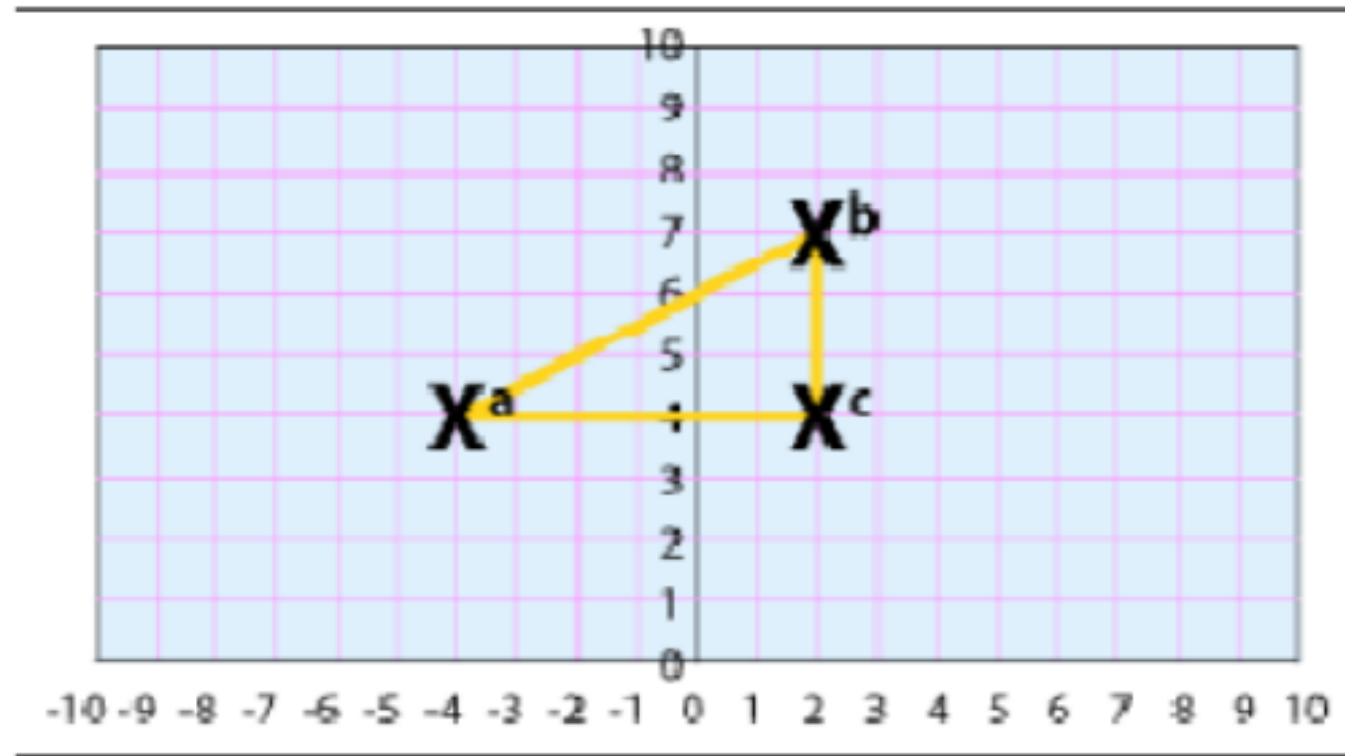TYM Page 134 & 135
Tri Sec A
Pen Sec B
Hex Sec C
Ext 133 C

Here is a shaded square. Write the coordinates for point A and point C.
Explain how you worked them out by annotating the diagram.

This shape is translated 5 squares right and 2 squares down. Write the coordinates of its new vertices.

Three of the four vertices of a square are (3, 10), (5, 12) and (7, 10). Work out the coordinates of the fourth vertex.

ANSWERS

Accurately drawn co-ordinate grids which shapes translated correctly.