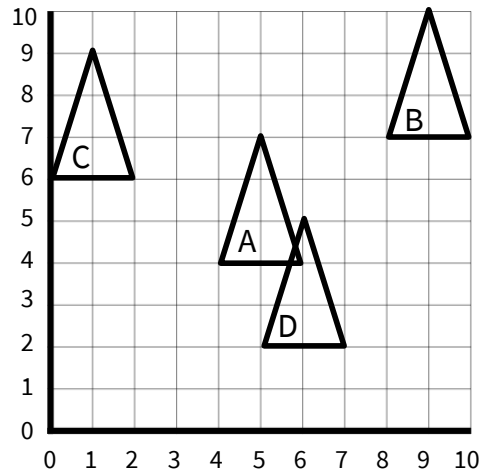


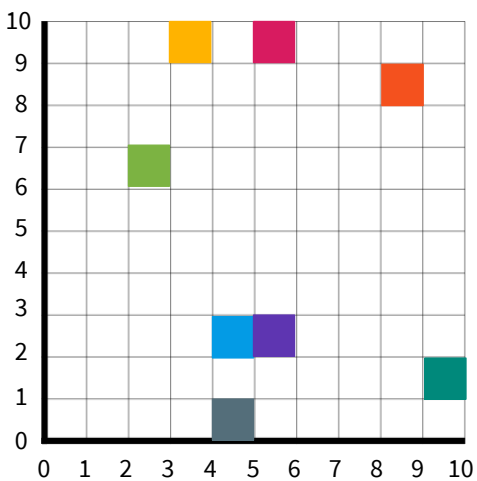
## To translate shapes in the first quadrant - Questions

1. Describe the translation of:

- a. Shape A to shape B.
- b. Shape A to shape C.
- c. Shape A to shape D.



d. Match the translations.



1 left and 7 up

5 left and 1 down

2 right and 4 down

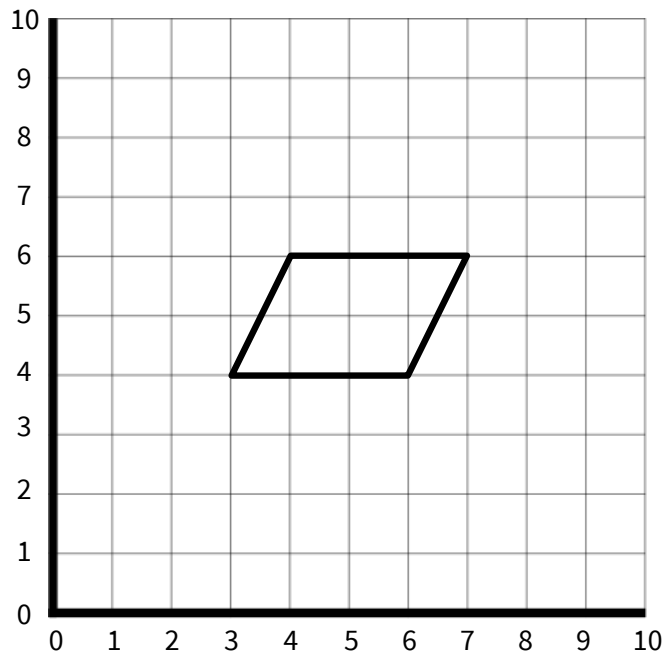
to

to

to

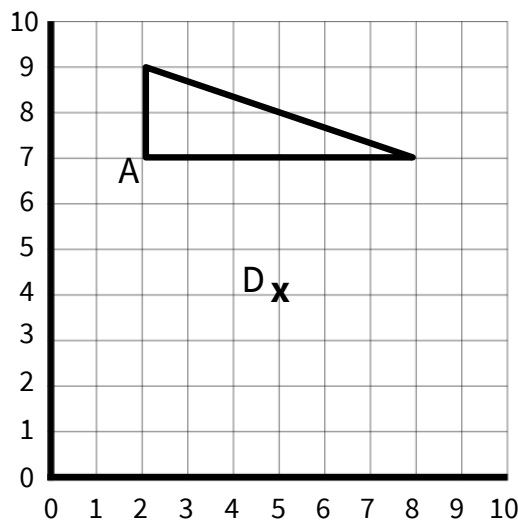
## To translate shapes in the first quadrant - Questions

2. Draw shape A in the new positions on the grid after these translations and label the new shapes:
- a. Shape A is translated 3 squares right to become shape B.
  - b. Shape A is translated 2 squares left to become shape C.
  - c. Shape A is translated 3 squares down to become shape D.
  - d. Shape A is translated 1 square right and 4 squares up to become shape E.
  - e. Shape A is translated 3 squares left and 4 squares down to become shape F.

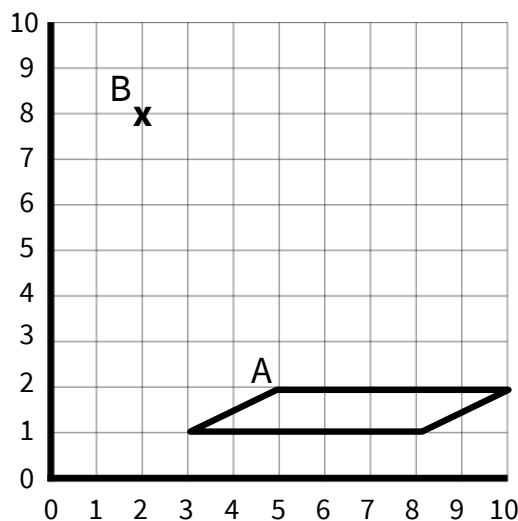


## To translate shapes in the first quadrant - Questions

3. a. Ava is translating shape ABC so that point A translates to point D. Ava says, 'I can't do this translation because the shape won't fit on my grid.' Do you agree with Ava? Explain your answer.



- b. A parallelogram is drawn on a grid. It is translated so that the point A translates to point B. Draw the parallelogram in its new position and write its new coordinates. How would you describe the translation?



## To translate shapes in the first quadrant - Answers

Question No.	Question	Answer
1	Describe the translation of: a. Shape A to shape B. b. Shape A to shape C. c. Shape A to shape D. d. Match the translations.	a. Shape A has been translated 4 squares right and 3 squares up b. Shape A has been translated 4 squares left and 2 squares up c. Shape A has been translated 1 square right and 2 squares down d. Turquoise to Grey: 5 left and 1 down Green to Blue: 2 right and 4 down Blue to Yellow: 1 left and 7 up
2	Draw shape A in the new positions on the grid after these translations and label the new shapes: a. Shape A is translated 3 squares right to become shape B. b. Shape A is translated 2 squares left to become shape C. c. Shape A is translated 3 squares down to become shape D. d. Shape A is translated 1 square right and 4 squares up to become shape E. e. Shape A is translated 3 squares left and 4 squares down to become shape F.	After translation, shapes should be drawn at the following positions:  Shape B (6,4) (9,4) (10,6) (7,6) Shape C (1,4) (4,4) (2,6) (5,6) Shape D (3,1) (6,1) (7,3) (4,3) Shape E (4,8) (7,8) (8,10) (5,10) Shape F (0,0) (3,0) (4,2) (1,2)
3	a. Ava is translating shape ABC so that point A translates to point D. Ava says, 'I can't do this translation because the shape won't fit on my grid.' Do you agree with Ava? Explain your answer. b. A parallelogram is drawn on a grid. It is translated so that the point A translates to point B. Draw the parallelogram in its new position and write its new coordinates. How would you describe the translation?	a. Ava is correct, she cannot draw the shape in the new position on this grid because the base of the triangle is 6 squares long, and there are only 5 squares to the right of point D on this grid. It would be possible to translate the triangle if the x axis on this grid extended beyond 10. b. The parallelogram will have these coordinates after translation: (0,7) (5,7) (7,8) (2,8). The shape has been translated 3 squares left and 6 squares up.