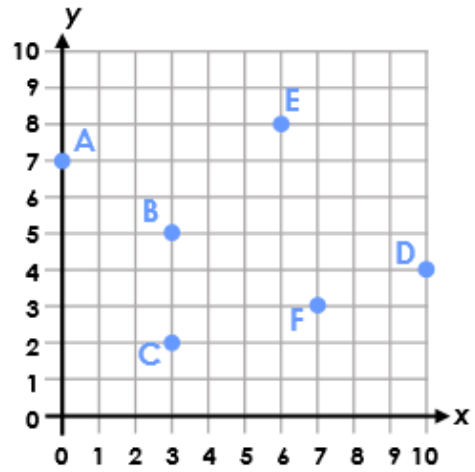
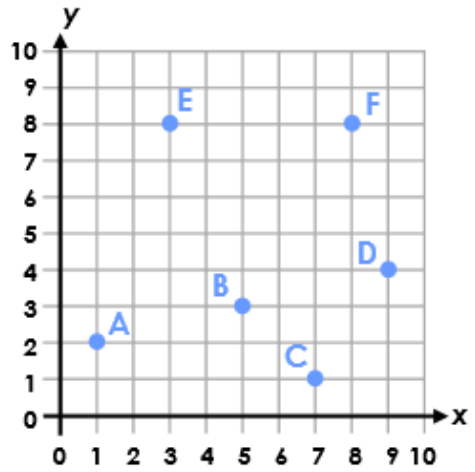
Week 7 Lesson 1 Activity – Position and Direction

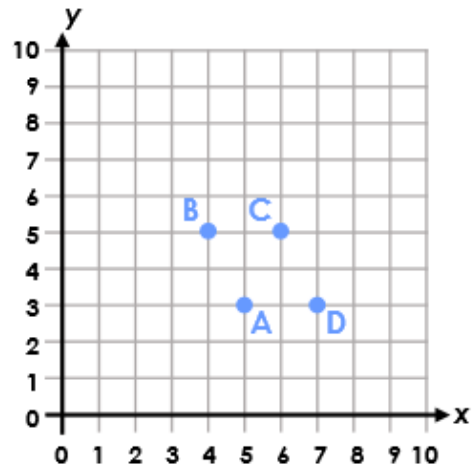
4a. Write the coordinates of all the marked points on the grid.



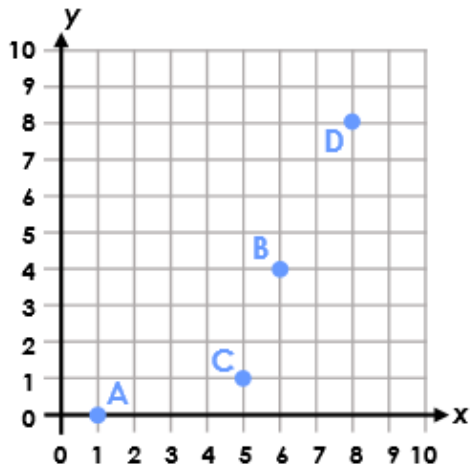
4b. Write the coordinates of all the marked points on the grid.



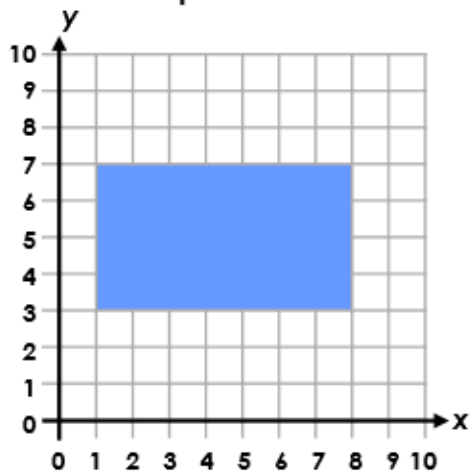
5a. Each point moves two squares up. Write the new coordinates of each point.



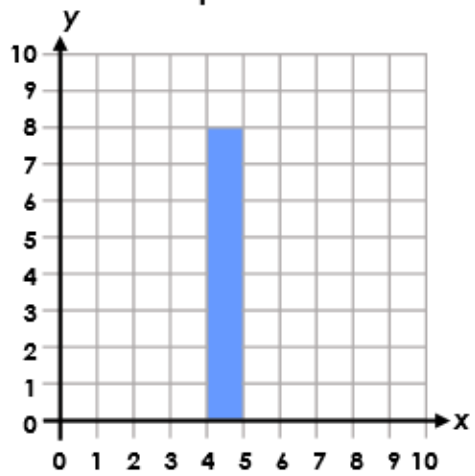
5b. Each point moves two squares right. Write the new coordinates of each point.



6a. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.

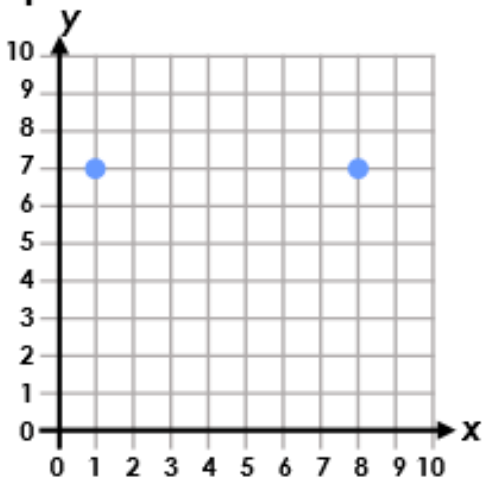


6b. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.



Week 7 Lesson 1 Challenge

5a. Two coordinates out of four have already been plotted. Write the rest of the coordinates and join them on the grid to create a quadrilateral.

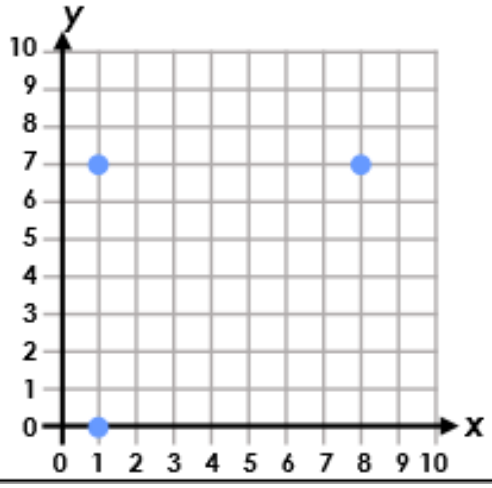


E

PS

6a. True or false? Explain your answer.

If I have 3 coordinates of a square, I can calculate the fourth.



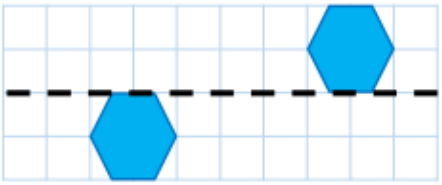
E

R

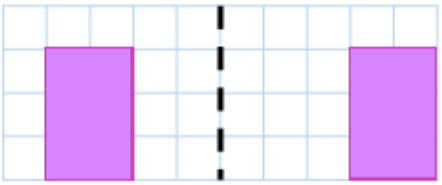
Week 7 Lesson 2 Activity – Position and Direction

5a. Are the reflected images correct or incorrect?

A.

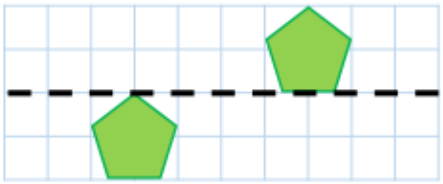


B.

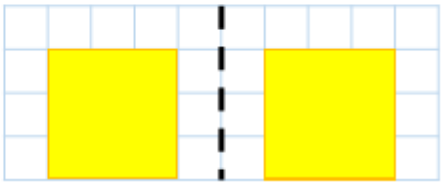


5b. Are the reflected images correct or incorrect?

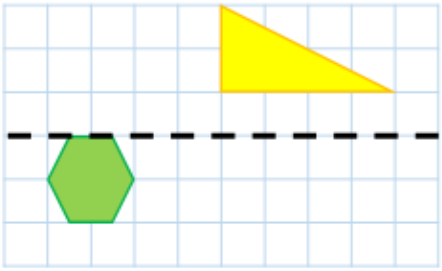
A.



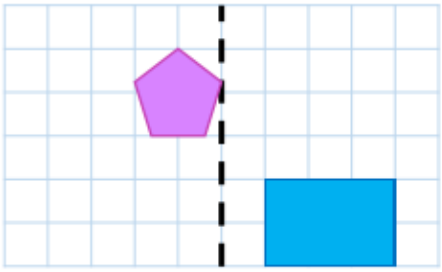
B.



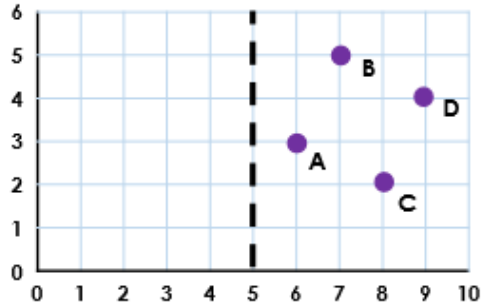
6a. Reflect the shapes in the mirror line.



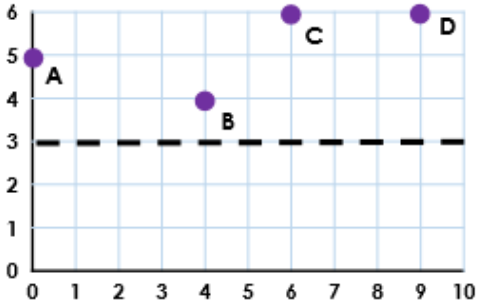
6b. Reflect the shapes in the mirror line.



7a. Reflect the points in the mirror line. Write the coordinates of the reflected points.

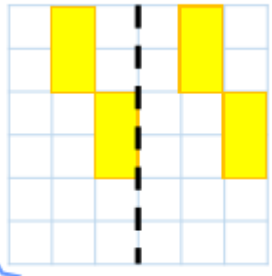


7b. Reflect the points in the mirror line. Write the coordinates of the reflected points.

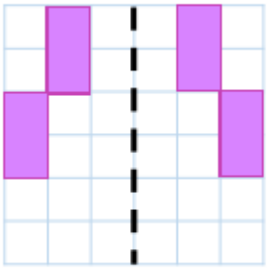


8a. Tick the image showing the correct reflection.

A.

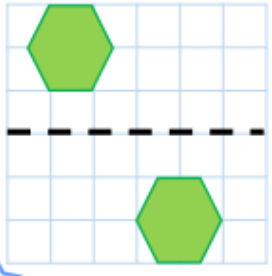


B.

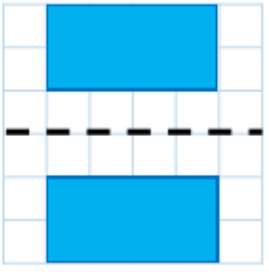


8b. Tick the image showing the correct reflection.

A.

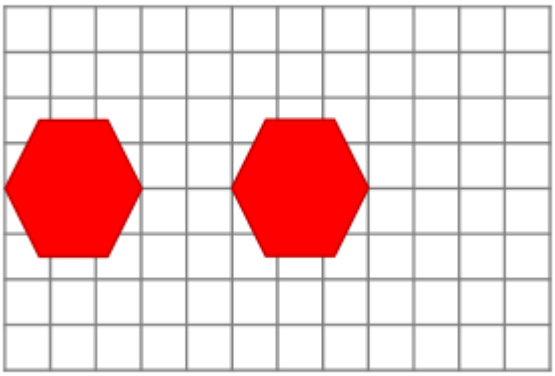


B.

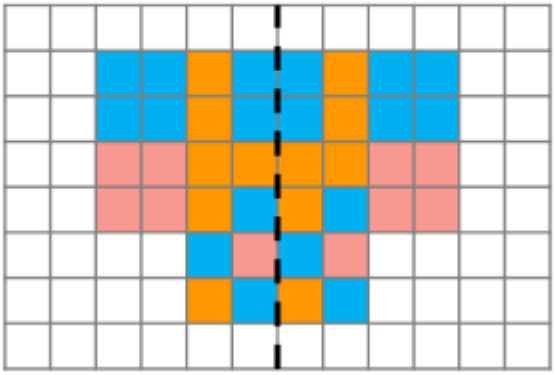


Week 7 Lesson 2 Challenge

5b. Draw the mirror line so that the reflection is accurate.



6b. Put a cross on the mistakes in the reflection below.

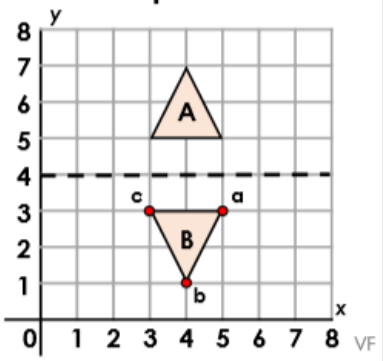


reflection

Week 7 Lesson 3 Activity – Position and Direction

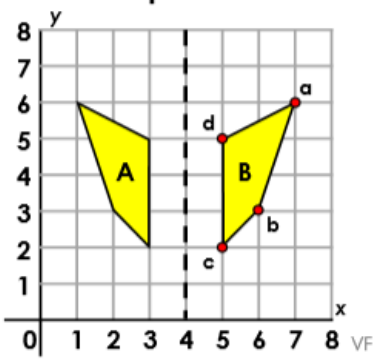
5a. Shape A has been reflected. Fill in the missing coordinates for Shape B.

Point	Shape B
a	(5, 3)
b	(,)
c	(,)



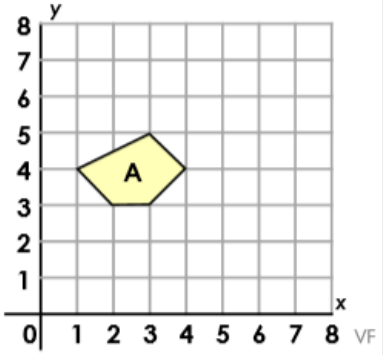
5b. Shape A has been reflected. Fill in the missing coordinates for Shape B.

Point	Shape B
a	(7, 6)
b	(,)
c	(,)
d	(,)



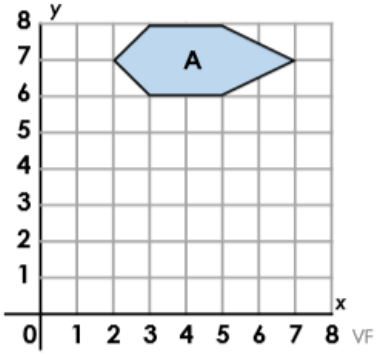
6a. Draw a line of symmetry so that the below coordinates show a reflection of Shape A:

(4, 4)
(5, 5)
(7, 4)
(6, 3)
(5, 3)



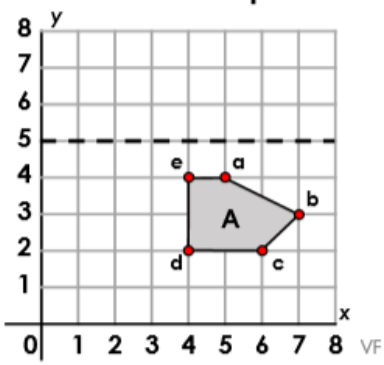
6b. Draw a line of symmetry so that the below coordinates show a reflection of Shape A:

(3, 2)
(2, 1)
(3, 0)
(5, 0)
(7, 1)
(5, 2)



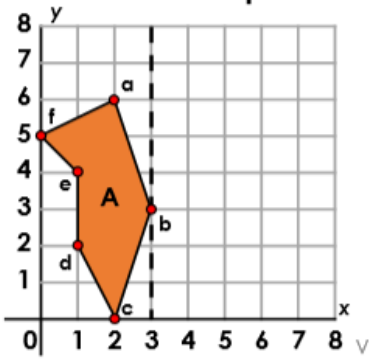
8a. Reflect Shape A to create Shape B. Write the coordinates for both shapes.

Point	Shape A	Shape B
a	(,)	(,)
b	(,)	(,)
c	(,)	(,)
d	(,)	(,)
e	(,)	(,)



8b. Reflect Shape A to create Shape B. Write the coordinates for both shapes.

Point	Shape A	Shape B
a	(,)	(,)
b	(,)	(,)
c	(,)	(,)
d	(,)	(,)
e	(,)	(,)
f	(,)	(,)



Challenge

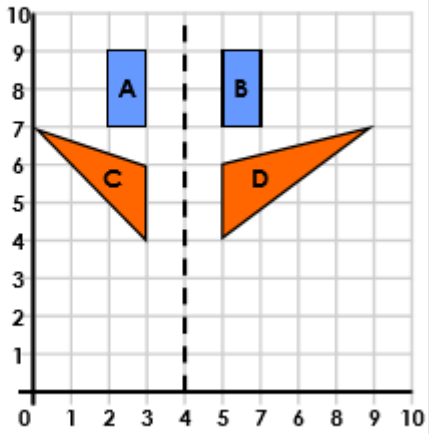
4a. Explain the three mistakes below.

A (2, 7) (2, 9) (3, 9) (3, 7)

B (5, 7) (5, 8) (6, 9) (6, 7)

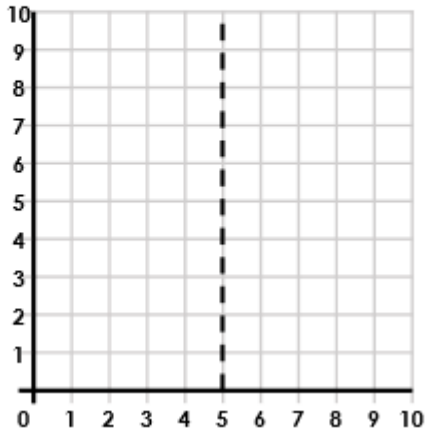
C (0, 7) (3, 6) (3, 4)

D (8, 7) (5, 6) (5, 4



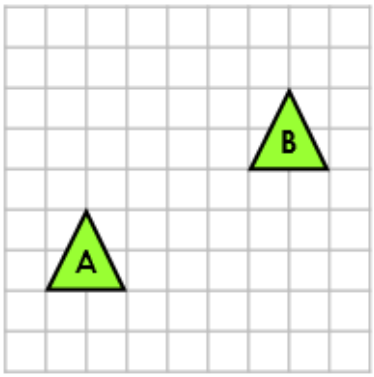
5a. Plot these coordinates and join them in order. Reflect it. What have you drawn?

(5, 9)
(4, 6)
(1, 6)
(3, 4)
(2, 1)
(5, 3)



Week 7 Lesson 4 Activity – Position and Direction

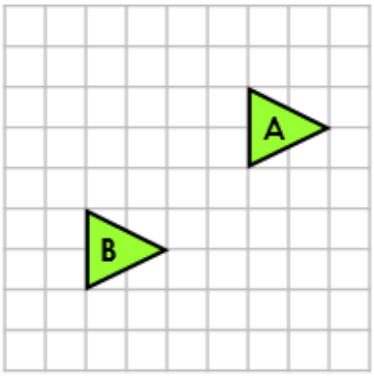
4a. Tick the translation from shape A to shape B.



☐ 5 right, 2 up

☐ 5 right, 3 up

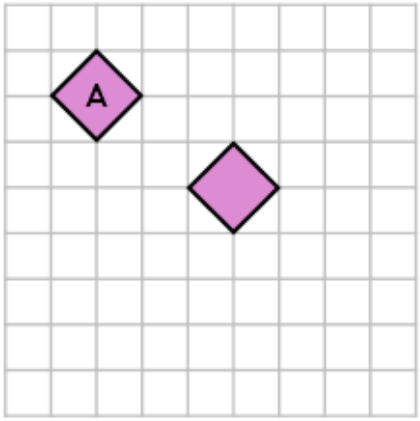
4b. Tick the translation from shape A to shape B.



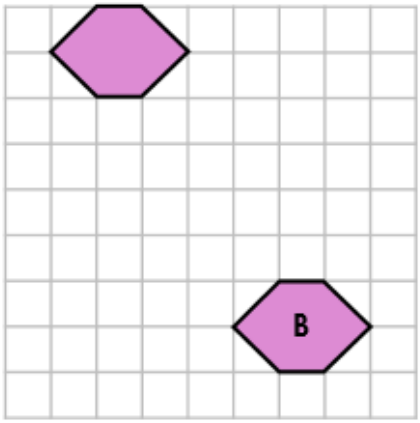
☐ 4 left, 3 down

☐ 4 left, 4 down

5a. True or false? Shape A has been translated 3 right and 2 down.

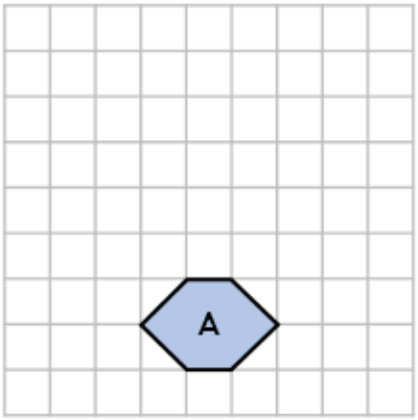


5b. True or false? Shape B has been translated 4 left and 5 up.



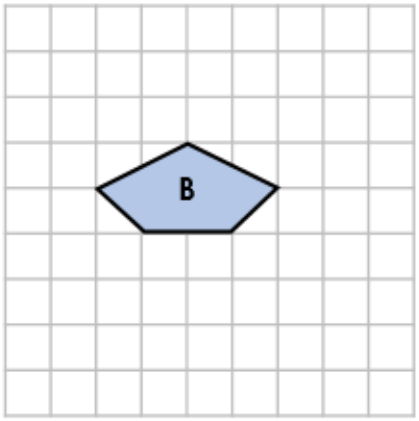
6a. Translate shape A 1 right, 3 up.

The translate shape A 2 left, 4 up



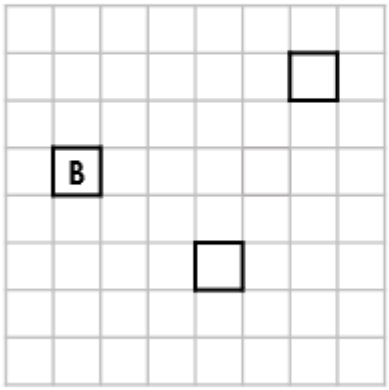
6b. Translate shape B 3 right, 3 up.

Then translate shape B 2 left, 2 down.



Challenge

5b. Starting from shape B each time, circle the translation that has not been completed.



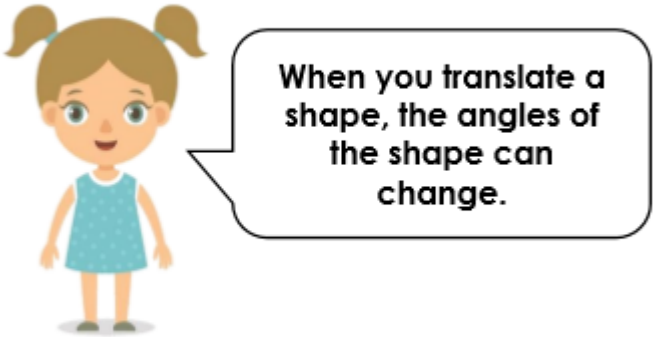
5 right, 2 up

4 right, 0 down

3 right, 2 down

E Complete the missing translation. PS

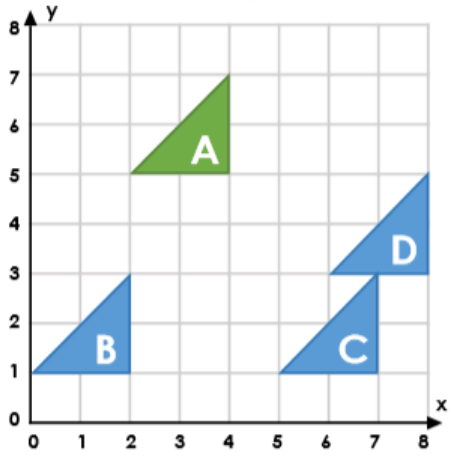
6b. Kenya is translating shapes.



Do you agree with Kenya? Support your answer by drawing your own example.

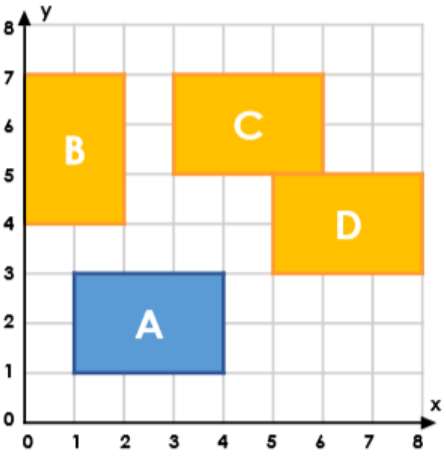
Week 7 Lesson 5 Activity – Position and Direction

4a. Triangle A is translated 3 right and 4 down. What are the coordinates of the vertices of the correctly translated shape?



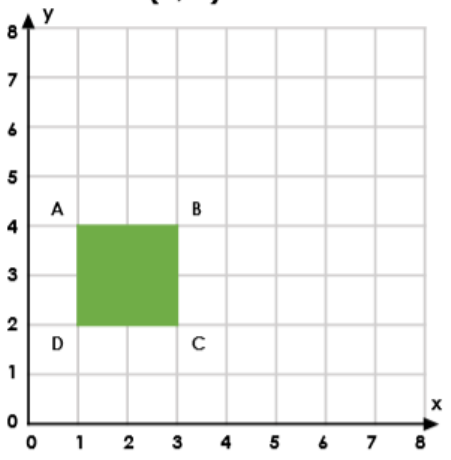
VF

4b. Rectangle A is translated 4 right and 2 up. What are the coordinates of the vertices of the correctly translated shape?



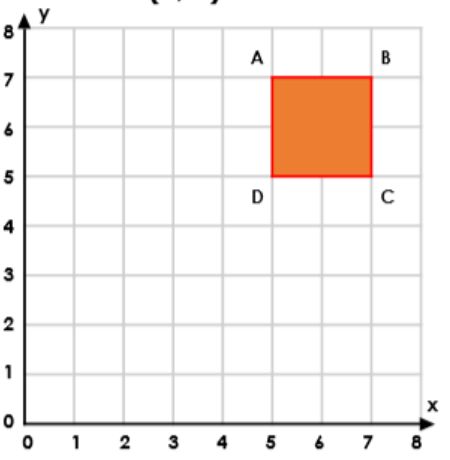
VF

5a. True or false? If the square is translated 1 left and 2 up, the new coordinates of vertex B will be (4, 6).



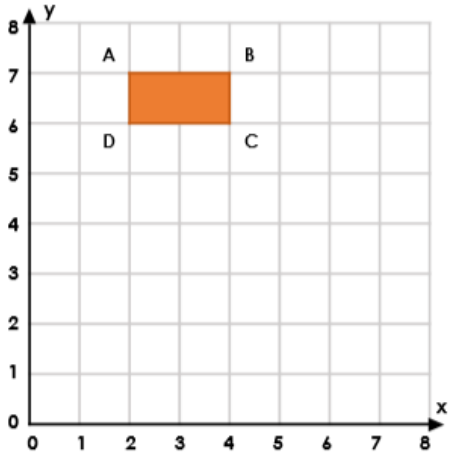
VF

5b. True or false? If the square is translated 4 left and 5 down, the new coordinates of vertex A will be (1, 2).



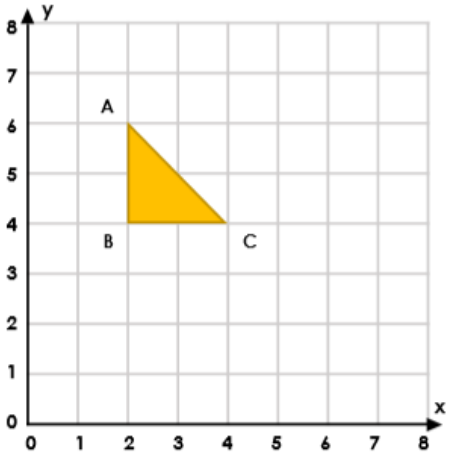
VF

6a. This shape has been translated 2 left and 6 up. What are the original coordinates of each vertex?



VF

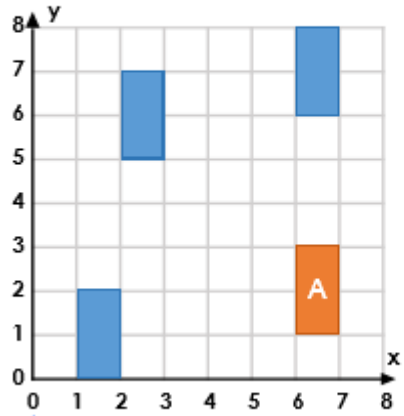
6b. This shape has been translated 3 left and 3 up. What are the original coordinates of each vertex?



VF

Challenge

4b. Shape A is translated to three new places on the grid. Which set of coordinates does not match a translation?



A. (2, 7) (3, 7) (2, 5) (3, 5)

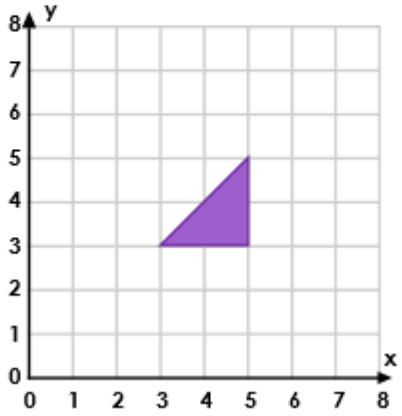
B. (3, 4) (4, 4) (3, 2) (4, 2)

C. (6, 8) (7, 8) (6, 6) (7, 6)

D. (1, 2) (2, 2) (1, 0) (2, 0)

PS

5b. Lorelai must translate this shape 3 units then 2 units, but she can't remember the directions. What could the coordinates of the translated shape be?



PS