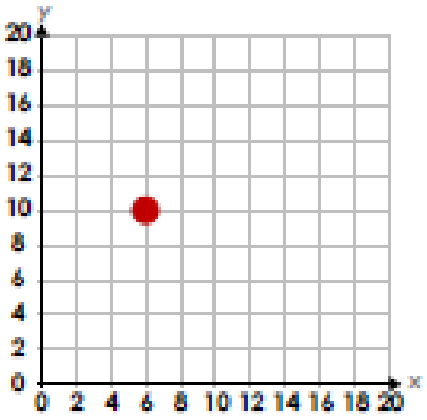
15/7/20 - Maths

Skill: Moving on a Grid (translation) - varied fluency & reasoning

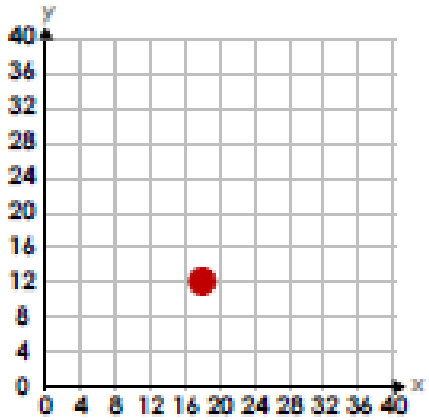
*First, complete the PowerPoint document attached.

Fluency:

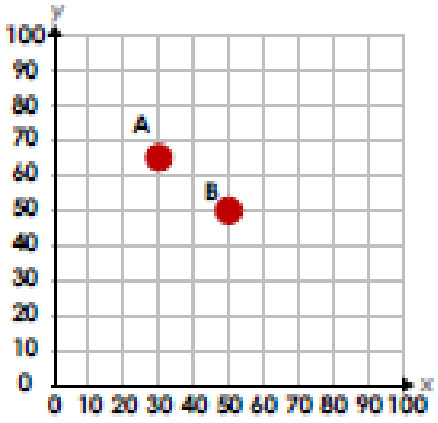
7a. Translate the point 4 left and 6 down. Record the new coordinates.



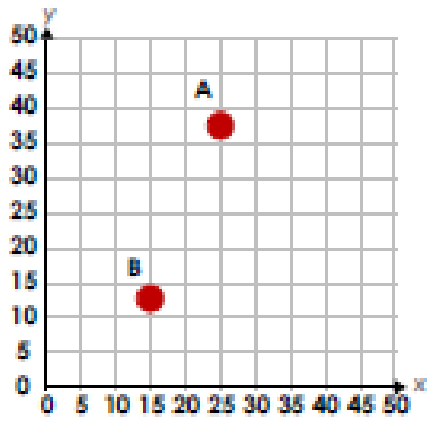
7b. Translate the point 10 right and 12 up. Record the new coordinates.



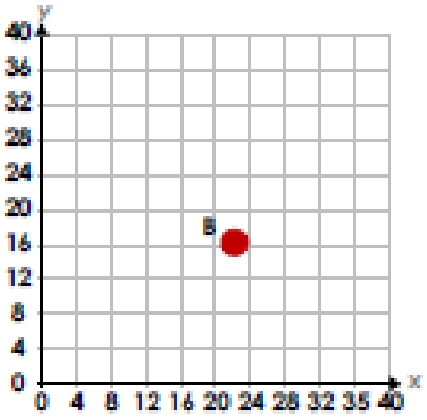
8a. True or False? Point A has been translated 20 left and 15 down to point B.



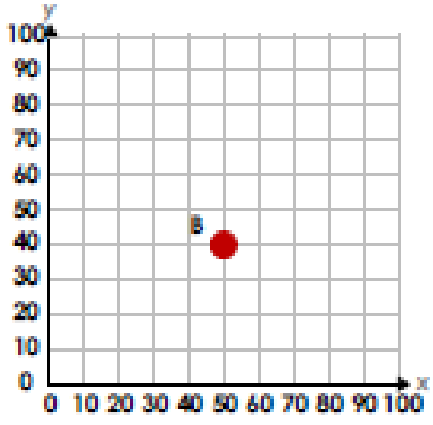
8b. True or False? Point A has been translated 10 left and 25 down to point B.



9a. Point A has been translated 10 right and 6 up to point B. Record the original coordinates for point A.

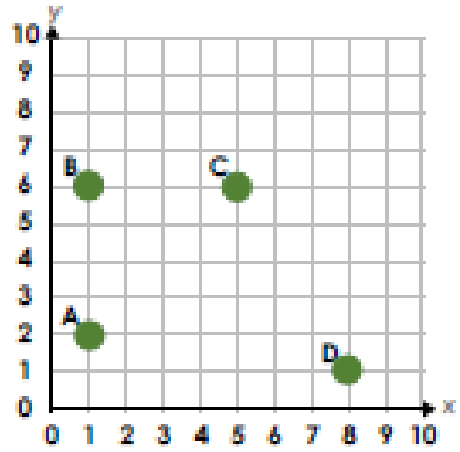


9b. Point A has been translated 5 right and 25 down to point B. Record the original coordinates for point A.

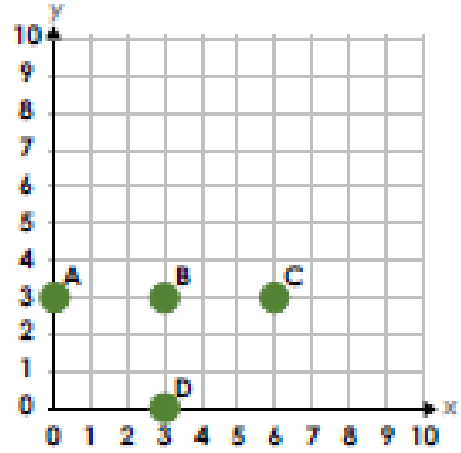


Reasoning

4a. Move one point to create the vertices for a square. Record the new coordinates.



4b. Move one point to create the vertices for a square. Record the new coordinates.



5a. Points are placed on the following coordinates:

(7, 5) (4, 7) (1, 4)

Each of the points have been moved 1 square in one direction and 3 squares in another.

What could the new coordinates be? Find 2 possibilities.

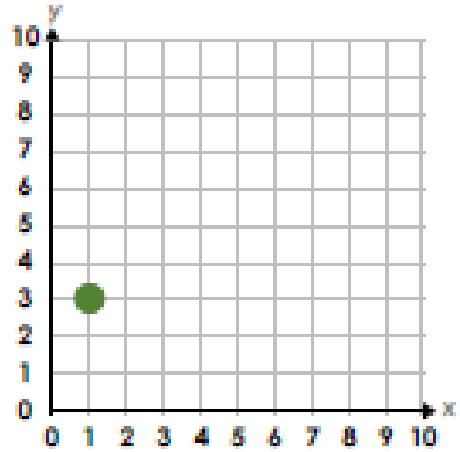
5b. Points are placed on the following coordinates:

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

Each of the points have been moved 2 square in one direction and 2 squares in another.

What could the new coordinates be? Find 2 possibilities.

6a. The point was moved 3 left and 2 up. Ben thinks the original coordinates were (4, 1). Is he correct? Prove it.



6b. The point was moved 5 right and 1 up. Eve thinks the original coordinates were (1, 1). Is she correct? Prove it.