

## Summer 2- Wk 4    Maths Answers

### **Lesson 1: 22.6.20**

#### Challenge 1:

1. The coordinates of the translated shape are (3,7) (5,7) (3,5) (5,5)
2. 6 squares up and 3 squares left.
3. Shape A has been translated 3 squares right and 2 squares down to shape B.

#### Challenge 2:

1. Blue to green = 4 right, 2 down    Brown to blue = 2 left, 3 up    Yellow to pink = 5 left, 5 down.
2. Yellow square - (4,7) (5,7) (4,6) (5,6)    Green rectangle - (7,9) (9,9) (7,8) (9,8)  
Red triangle - (2,2) (3,3) (4,2)
3. Darcey is wrong. When shapes are translated, nothing changes except for their position.

#### Challenge 3:

1. Any sensible answer e.g. it would be simpler to leave out the left/right direction, just say "5 squares down"
2. Dora's translation is incorrect. She has drawn the triangle 7 squares up but **5** squares to the right, not 2 squares.
3. Amir is incorrect. Point B is level with point C and lower than point A, so the triangle WILL fit on the grid.

### **Lesson 2: 23.6.20**

#### Challenge 1:

1. (4,9)
- 2.

	Before	After
A	(3,8)	(4,6)
B	(2,3)	(3,1)
C	(6,4)	(7, 2)

#### Challenge 2:

1. The translation is 2 right, 3 up. The other translated coordinates are: A (3,8) B (5,8) and C (5,5)
- 2.



3. Amir is correct, the new coordinates are (33,10)

Challenge 3:

1. You need to work backwards. You add 3 squares to the x coordinate (to go right) and add 2 squares to the y coordinate (to go up). The new coordinates are:  
Blue (6,10) Yellow (9,7) Green (5,3) Purple (10,2)
2. Jane is right about the x coordinates, but she is wrong about the y coordinates. You should ADD 4 to the y coordinate, not subtract.
3. I do not agree with Caleb. A – He has written the x and y coordinates in the wrong order. B – The new coordinates are not (5, 1), (5, 4), (3, 3) and (3, 0); they are (1, 5), (4, 5), (3, 3) and (0, 3).

# Year 5

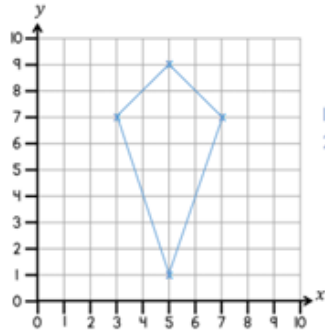
## Position & Direction



Name \_\_\_\_\_

- 1 Plot the coordinates on the grid.

(5, 9) (3, 7) (7, 7) (5, 1)



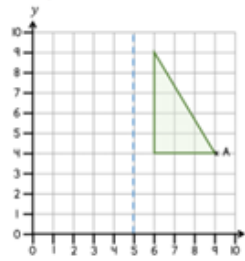
1 mark for  
2 correct.

Join the points.  
What type of quadrilateral have you drawn?

Kite



- 2 Reflect the triangle in the mirror line.

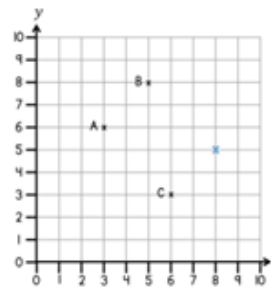


What are the coordinates of the new point A?

(1, 4)



- 3 Write down the coordinates of points A, B and C.



A = (3, 6)

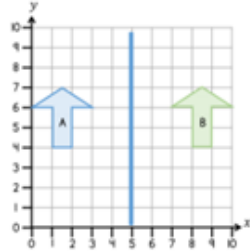
B = (5, 8)

C = (6, 3)

Plot the final point to make a rectangle.



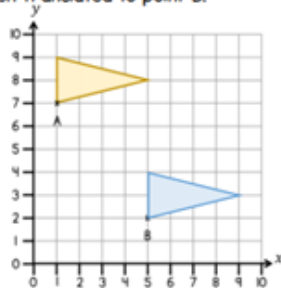
- 4 Arrow A has been reflected to Arrow B.  
Draw the mirror line.



Complete the sentence to describe the translation from A to B.

Arrow A has moved 7 right and 0 up.

- 5 Point A has been translated to point B.

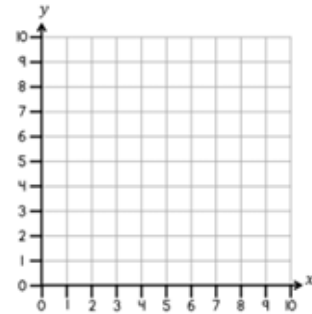


Describe the translation.

Point A has been translated 4 right and 5 down

Complete the translation for the triangle.

- 6 Complete the coordinates.  
You may use the grid to help.



(4, 9) translated 3 left is (1, 9)

(6, 2) translated 1 down is (6, 1)

(4, 5) translated 2 right and 5 up is (6, 10)

(7, 2) translated 7 up is (7, 9)

1 mark

1 mark

2 marks

1 mark

Circle how confident you feel with position & direction

1

2

3

4

5

Not  
confident

Ver  
confident

#### Lesson 4: 25.6.20

Let's Practise(1) : 5,095m = 5.095km    6,104m = 6.104km    5,950m = 5.95km  
5,905m = 5.905km    6,140m = 6.14km

Let's Practise(2) : 6,702g = 6.702kg    8,480g = 8.48kg    6,072g = 6.072kg  
8,408g = 8.408kg    6,720g = 6.72kg

Challenge 1:

- To convert kilometres to metres, multiply by 1,000.  
To convert metres to kilometres, divide by 1,000.  
To convert grams to kilograms, divide by 1,000.  
To convert kilograms to grams, multiply by 1,000.

2. 3kg = 3,000g    5kg = 5,000g    4kg = 4,000g

3. There are 1,000m in one kilometre.    1.34km = 1,340m    861m = 0.861km  
3,500m = 3.5km    9.075km = 9,075m

Challenge 2:

1.  $500\text{g} = 0.5\text{kg}$        $2\text{kg} = 2,000\text{g}$        $2.5\text{kg} = 2,500\text{g}$        $4.5\text{kg} = 4,500\text{g}$
2. There are 1,000g in a kilogram.     $0.452\text{kg} = 4,520\text{g}$      $7,680\text{g} = 7.68\text{kg}$   
 $10,251\text{g} = 10.251\text{kg}$        $0.2935\text{kg} = 293.5\text{g}$      $3/4\text{kg} = 750\text{g}$   
 $1 \text{ and } 4/10\text{kg} = 1.4\text{kg}$
3. 3km 403m

Challenge 3:

1.  $5\text{kg} > 4,500\text{g}$        $12\text{kg} = 12,000\text{g}$        $3.7\text{km} > 370\text{m}$        $37,000\text{m} > 3.7\text{km}$
2. 9,800m (4,900 there and 4,900 back)
3. Lo Co supermarket. Their potatoes cost 7.7p per 100g, whilst the farm shop potatoes cost 12p per 100g.