

Week 1

This week in a nutshell:

Skills covered in the previous half terms will be necessary to fully access topics from this point onwards. Knowledge and skills will be extended, covering a broader range of topics.

Question 1: Ratio notation

Question 2: Limits of accuracy

Question 3: Patterns/ sequences

Question 4: Coordinates

Question 5: Circle terminology

There is an emphasis on use of correct notation and terminology this week. Students should be keeping notes in order to fully develop their mathematical literacy. The skills used this week will be developed in coming weeks so deal with any misconceptions early on.

This week's ideas for class discussion include:

Question 1: Ratio notation

- **Why does the order a ratio is written matter so much?**

Question 2: Limits of accuracy

- **Why might it be important to know the bounds of a number that has been rounded?**

Question 3: Patterns/ sequences

- **What famous number sequences can you name/describe?**
- **What famous patterns can you name?**
- **Are there visual patterns that can be expressed using numbers?**

Question 4: Coordinates

- **How do you remember the order for plotting coordinates?**

Question 5: Circle terminology

- **Are any of these terms used outside of maths? Why do you think this is the case?**

Week 1: Day 1

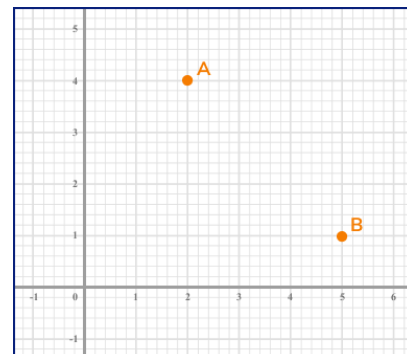
- 1) Write the ratio of red to blue.



- 2) State the upper and lower bounds if a number is 430 rounded to the nearest 10.

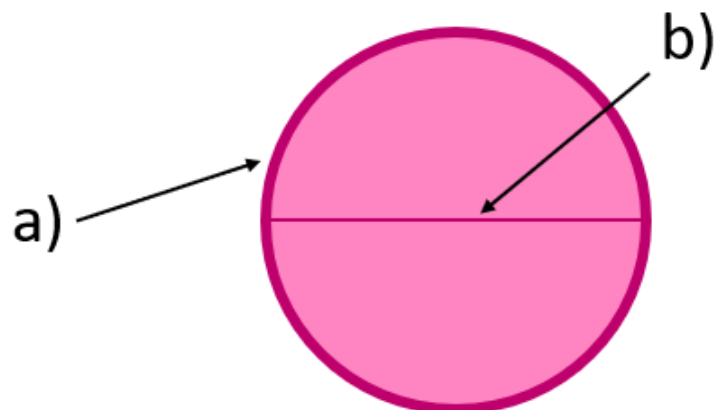
- 3) Fill in the missing numbers: 3, 6, 9, __, __, 18

- 4) What are the coordinates of *A* and *B*?



- 5) What part of the circle is labelled a).

What part of the circle is labelled b).



Week 1: Day 1 Answers

- 1) Write the ratio of red to blue. **3:2**

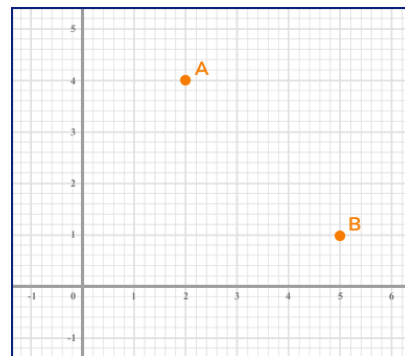


- 2) State the upper and lower bounds if a number is 430 rounded to the nearest 10. **UB = 435, LB = 425**

- 3) Fill in the missing numbers: 3, 6, 9, __, __, 18
3, 6, 9, **12**, **15**, 18

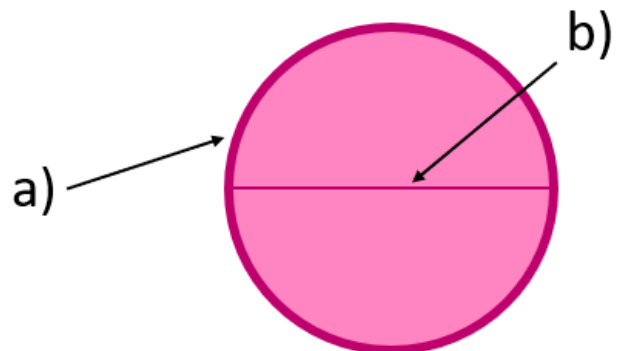
- 4) What are the coordinates of *A* and *B*?

***A*(2,4), *B*(5,1)**



- 5) What part of the circle is labelled a). **Circumference**

What part of the circle is labelled b). **Diameter**



Week 1: Day 2

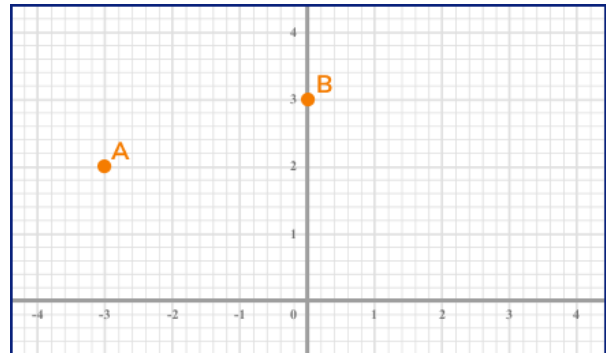
- 1) Write the ratio of blue to green.



- 2) State the upper and lower bounds if a number is 6000 rounded to the nearest 100.

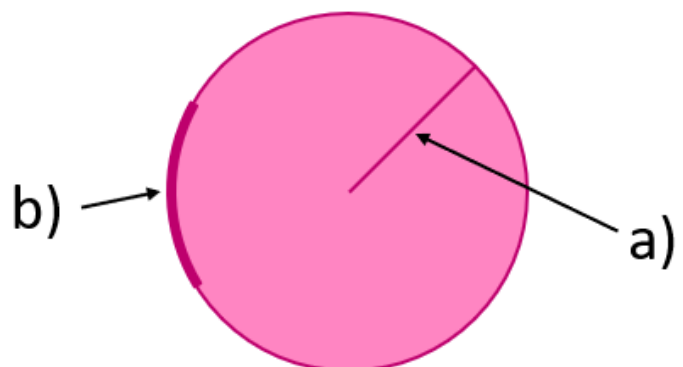
- 3) Fill in the missing numbers: 2, 4, 8, __ , __ , 64

- 4) What are the coordinates of *A* and *B*?



- 5) What part of the circle is labelled a).

What part of the circle is labelled b).



Week 1: Day 2 Answers

- 1) Write the ratio of blue to green. **2:4**

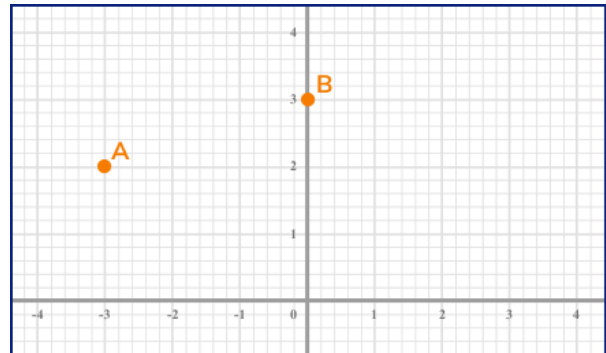


- 2) State the upper and lower bounds if a number is 6000 when rounded to the nearest 100. **UB=6050, LB=5950**

- 3) Fill in the missing numbers: 2, 4, 8, __ , __ , 64
2, 4, 8, **16** , **32** , 64

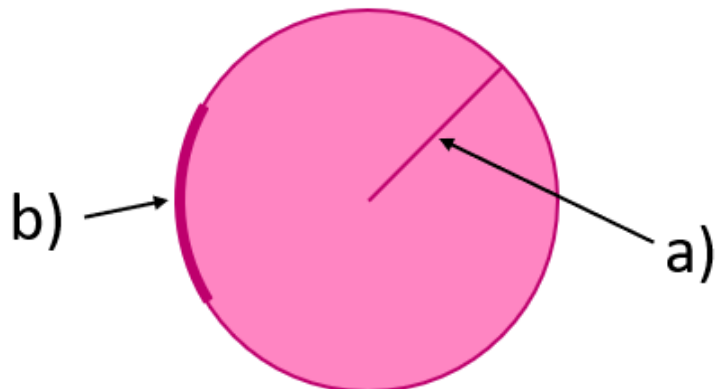
- 4) What are the coordinates of *A* and *B*?

***A*(-3,2), *B*(0,3)**



- 5) What part of the circle is labelled a). **Radius**

What part of the circle is labelled b). **Arc**



Week 1: Day 3

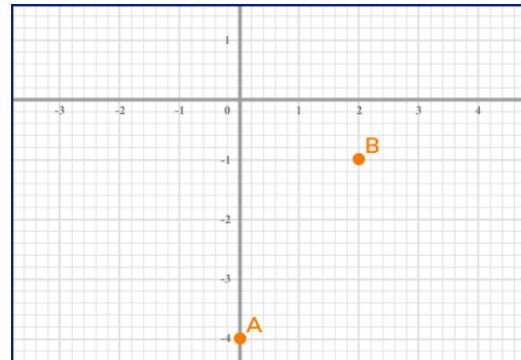
- 1) Write the ratio of red to green.



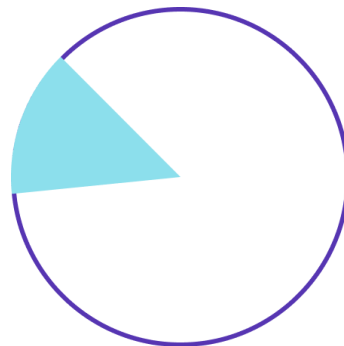
- 2) State the upper and lower bounds if a number is 57 rounded to the nearest integer.

- 3) Fill in the missing numbers: __ , __ , 11, 15, 19

- 4) What are the coordinates of A and B ?



- 5) What part of the circle is light blue?



Week 1: Day 3 Answers

- 1) Write the ratio of red to green. **3:4**

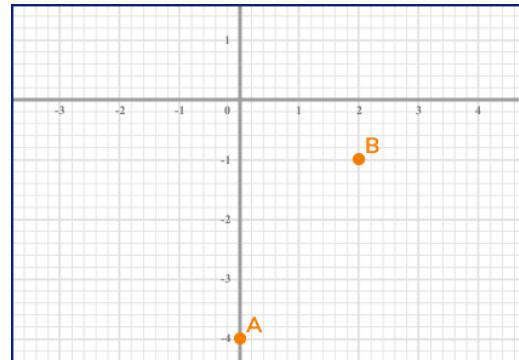


- 2) State the upper and lower bounds if a number is 57 rounded to the nearest integer. **UB=57.5, LB=56.5**

- 3) Fill in the missing numbers: __ , __ , 11, 15, 19
3 , 7 , 11, 15, 19

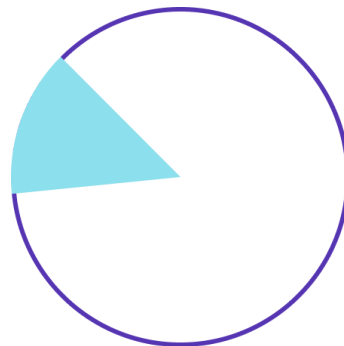
- 4) What are the coordinates of *A* and *B*?

***A*(0,-4), *B*(2,-1)**



- 5) What part of the circle is light blue?

Sector



Week 1: Day 4

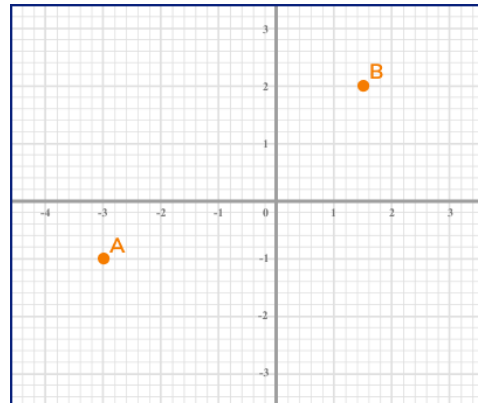
- 1) Write the ratio of red to blue to green.



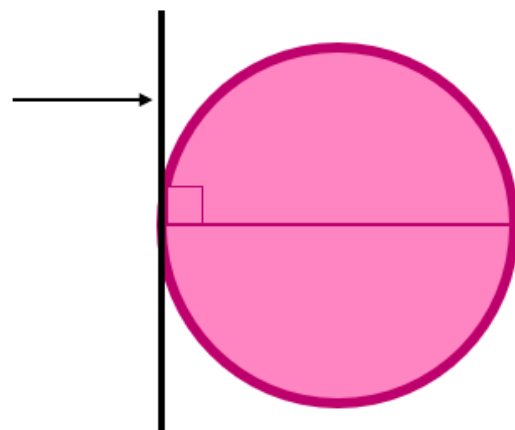
- 2) State the upper and lower bounds if a number is 6.5 rounded to the nearest tenth.

- 3) Fill in the missing numbers: __ , __ , -1, -6, -11

- 4) What are the coordinates of A and B ?



- 5) What part of the circle is the arrow pointing towards?



Week 1: Day 4 Answers

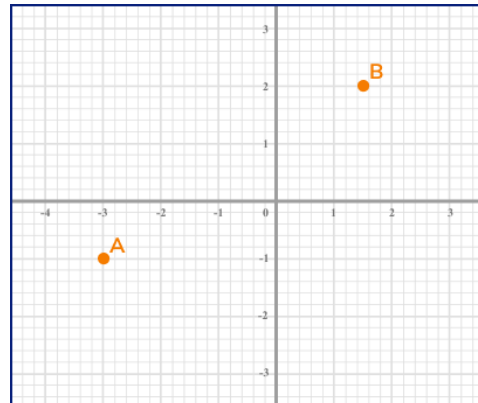
- 1) Write the ratio of red to blue to green. **2:3:4**



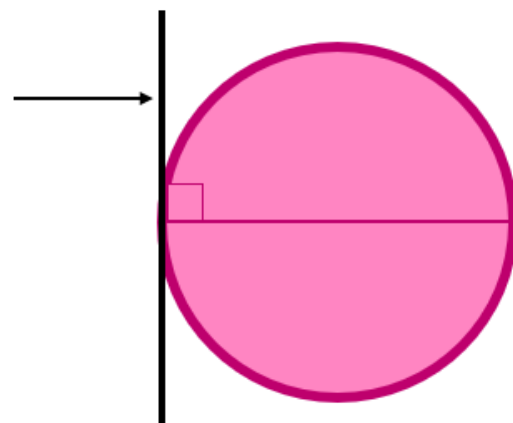
- 2) State the upper and lower bounds if a number is 6.5 rounded to the nearest tenth. **UB=6.55, LB=6.45**

- 3) Fill in the missing numbers: __ , __ , -1, -6, -11
9 , 4 , -1, -6, -11

- 4) What are the coordinates of *A* and *B*?
***A*(-3,-1), *B*(1.5,2)**



- 5) What part of the circle is the arrow pointing towards?
Tangent



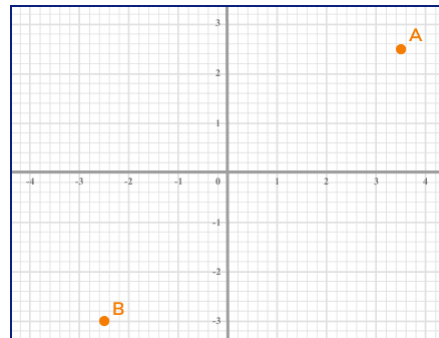
Week 1: Day 5

- 1) The ratio of the number of squares to circles is 5:2. Show this in a diagram.

- 2) State the upper and lower bounds if a number is 860 rounded to 2 significant figures.

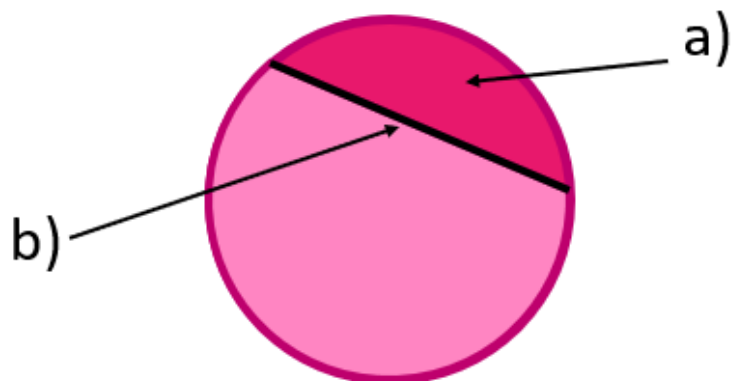
- 3) Fill in the missing numbers: 5, 9, __, __, 21

- 4) What are the coordinates of A and B ?



- 5) What part of the circle is labelled a).

Which part of the circle is labelled b).



Week 1: Day 5 Answers

- 1) The ratio of the number of squares to circles is 5:2. Show this in a diagram.

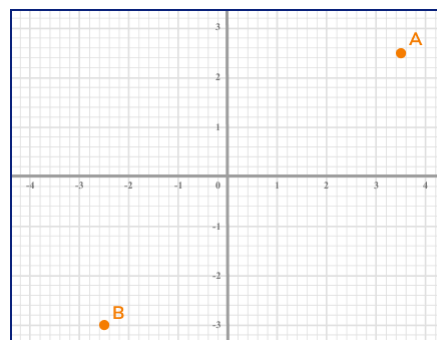


- 2) State the upper and lower bounds if a number is 860 rounded to 2 significant figures. **UB=865, LB=855**

- 3) Fill in the missing numbers: 5, 9, __, __, 21
5, 9, **13, 17**, 21

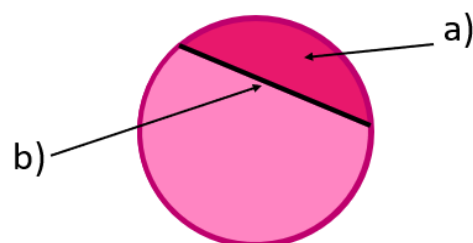
- 4) What are the coordinates of *A* and *B*?

***A*(3.5, 2.5), *B*(-2.5, -3)**



- 5) What part of the circle is labelled a). **Segment**

Which part of the circle is labelled b). **Chord**



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