

Week 2

This week in a nutshell:

Here we revisit topics from the autumn term for questions 1, 2 and 3; not only will students gain confidence and develop fluency, but these skills will continue to be needed to enhance understanding of future topics. Reading and plotting coordinates are dealt with together; this is to show the importance of both skills, and also to allow students to attempt the questions in the order designed to develop their understanding.

Question 1: Lowest common multiple (LCM)

Question 2: Forming expressions

Question 3: Order of operations

Question 4: Reading coordinates

Question 5: Plotting coordinates

This week's ideas for class discussion include:

Question 1: Lowest common multiple

- What methods for finding the LCM can you remember?

Question 2: Forming expressions

- What's the difference between forming an expression and forming an equation

Question 3: Order of operations

- Why does checking factors of a number help with multi-step calculations?
- What mnemonic do we generally use to make sure we do the operations in the correct order?

Question 4: Reading coordinates

- Which axis do you need to consider first?

Question 5: Plotting coordinates

- Can you think of a mnemonic that helps us plot coordinates in the right order?

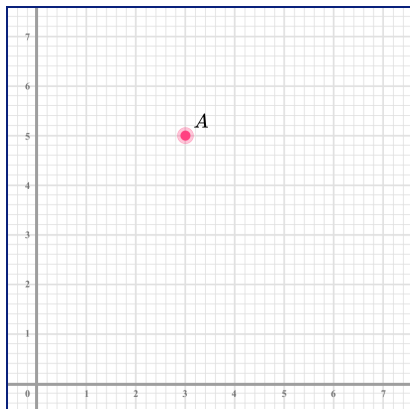
Week 2: Day 1

- 1) Find the lowest common multiple (LCM) of 3 and 4.

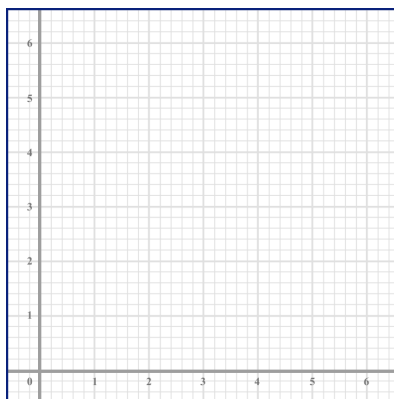
- 2) Write an algebraic expression that means “three lots of a number”.

- 3) Calculate $3 + 4 \times 2 =$

- 4) Write down the coordinates of point A.



- 5) Plot and label the points: A (1, 3) B (5, 0)



Week 2: Day 1 Answers

- 1) Find the lowest common multiple (LCM) of 3 and 4.

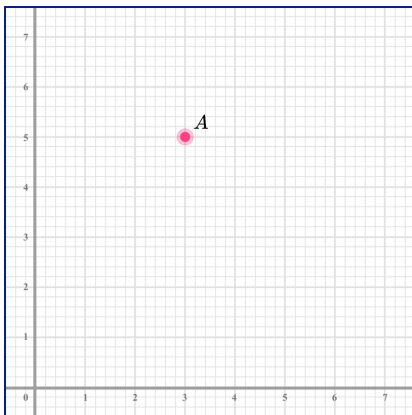
12

- 2) Write an algebraic expression that means “three lots of a number”.

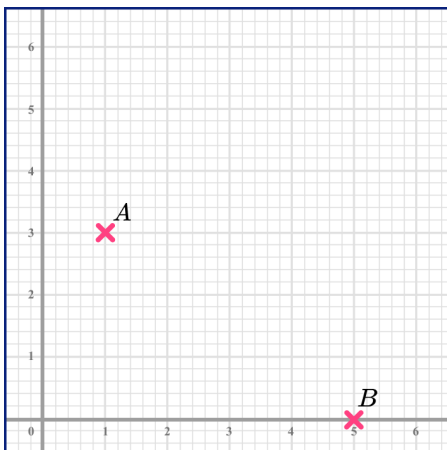
$3n$ (you could use a letter other than n)

- 3) Calculate $3 + 4 \times 2 = 3 + 8$
 $= 11$

- 4) Write down the coordinates of point A. (3, 5)



- 5) Plot and label the points: A (1, 3) B (5, 0)



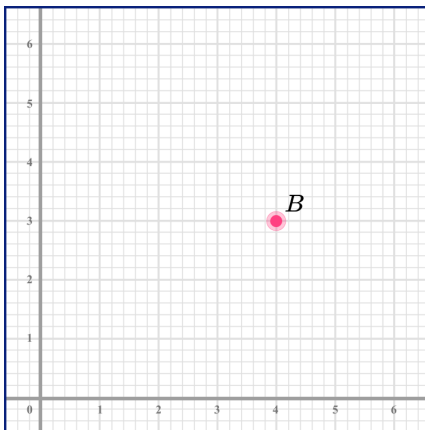
Week 2: Day 2

- 1) Find the lowest common multiple (LCM) of 12 and 20.

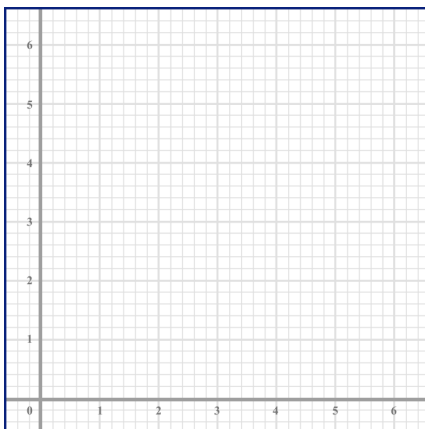
- 2) Write an algebraic expression that means “a number added to seven”.

- 3) Calculate $6 \times 3 - 8 \div 2 =$

- 4) Write down the coordinates of point B.



- 5) Plot and label the points: A (0, 3) B (2.5, 1)



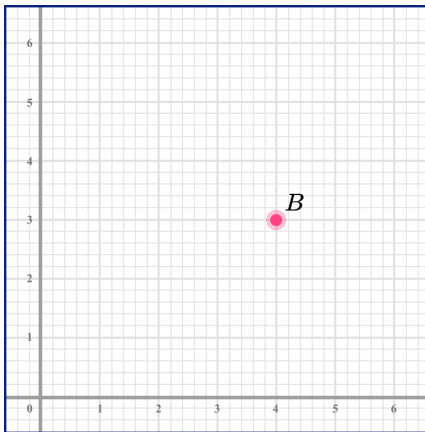
Week 2: Day 2 Answers

- 1) Find the lowest common multiple (LCM) of 12 and 20. **60**

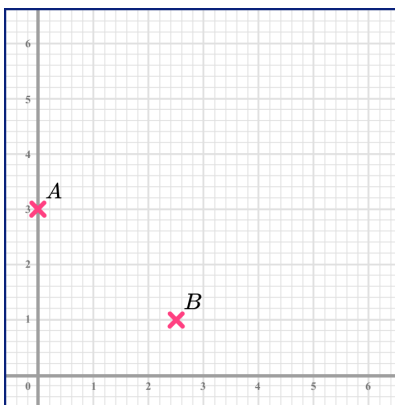
- 2) Write an algebraic expression that means “a number added to seven”.
 $7 + n$

- 3) Calculate $6 \times 3 - 8 \div 2 = \mathbf{18 - 4}$
 $= 14$

- 4) Write down the coordinates of point B. **(4, 3)**



- 5) Plot and label the points: A (0, 3) B (2.5, 1)



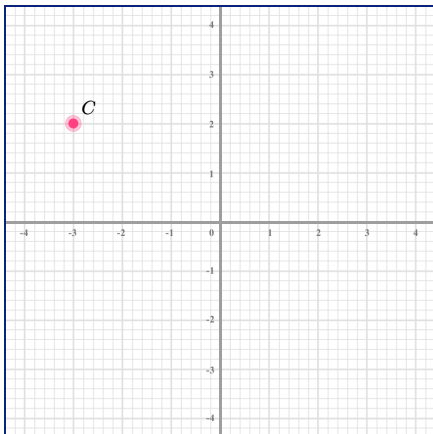
Week 2: Day 3

- 1) Find the lowest common multiple (LCM) of 4 and 12.

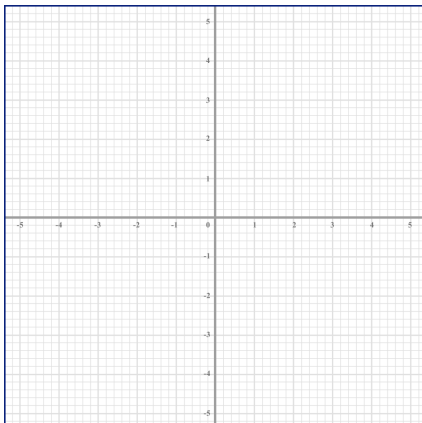
- 2) Write an algebraic expression that means “a number subtracted from thirteen”.

- 3) Calculate $(5 + 4)^2 + 3^2 =$

- 4) Write down the coordinates of point C.



- 5) Plot and label the points: A (1, 3) B (-2, 4)



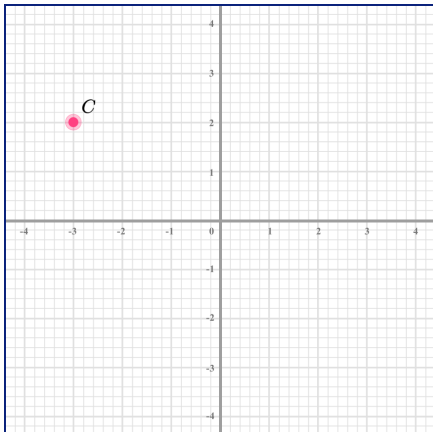
Week 2: Day 3 Answers

- 1) Find the lowest common multiple (LCM) of 4 and 12. **12**

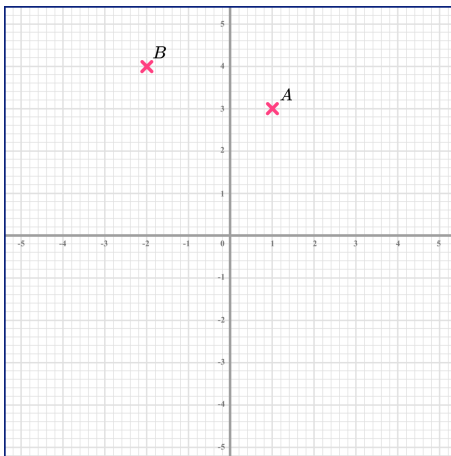
- 2) Write an algebraic expression that means “a number subtracted from thirteen”. **$13 - n$**

- 3) Calculate $(5 + 4)^2 + 3^2 = \mathbf{9^2 + 3^2}$
 $\mathbf{= 81 + 9}$
 $\mathbf{= 90}$

- 4) Write down the coordinates of point C. **$(-3, 2)$**



- 5) Plot and label the points: A (1, 3) B (-2, 4)



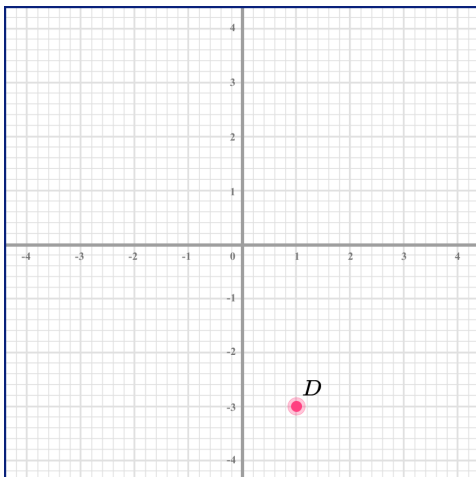
Week 2: Day 4

- 1) Find the lowest common multiple (LCM) of 5 and 7.

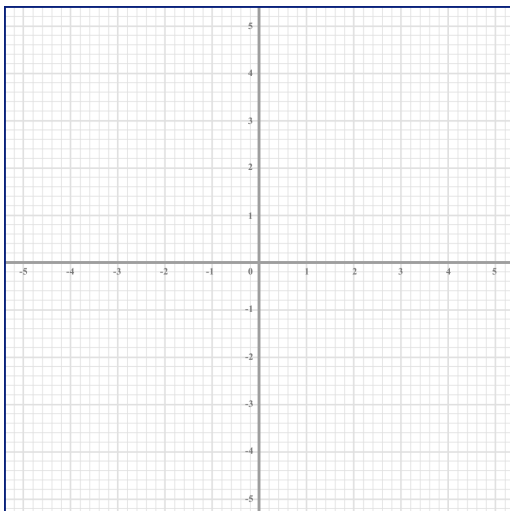
- 2) Write an algebraic expression that means “five divided by a number”.

- 3) Calculate $50 \div (8^2 - 2 \times 7) =$

- 4) Write down the coordinates of point D.



- 5) Plot and label the points: A (-1, -2) B (2, -3)



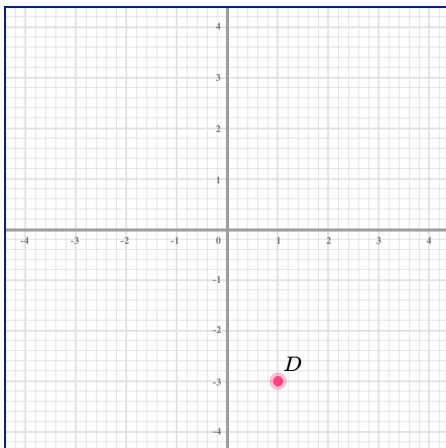
Week 2: Day 4 Answers

1) Find the lowest common multiple (LCM) of 5 and 7. **35**

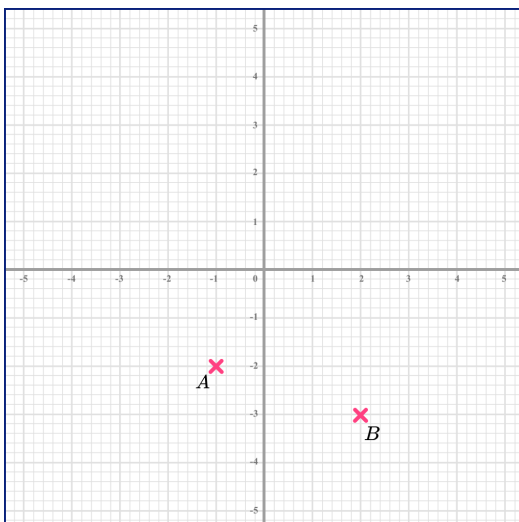
2) Write an algebraic expression that means “five divided by a number”. **$5/n$**

3) Calculate $50 \div (8^2 - 2 \times 7) = 50 \div (64 - 14)$
 $= 50 \div 50$
 $= 1$

4) Write down the coordinates of point D. **$(1, -3)$**



5) Plot and label the points: A $(-1, -2)$ B $(2, -3)$



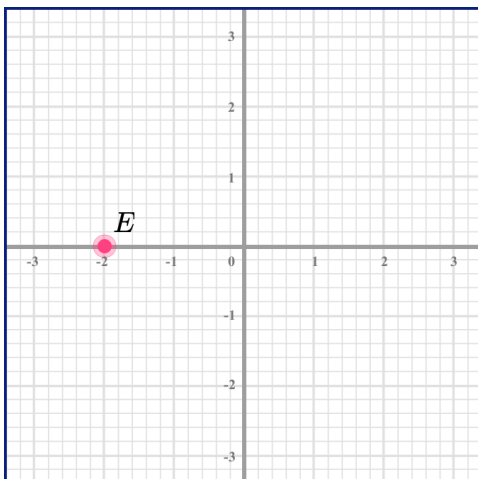
Week 2: Day 5

- 1) Find the lowest common multiple (LCM) of 6 and 15.

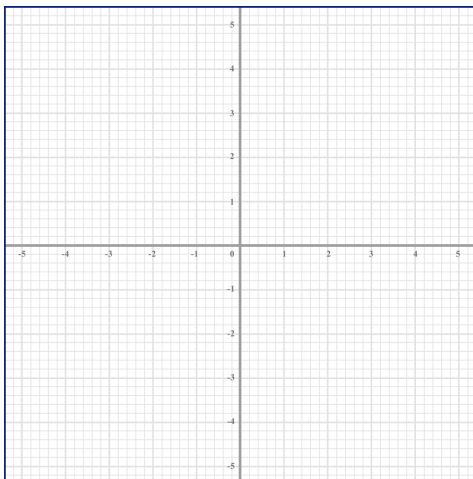
- 2) Write an algebraic expression that means “three added to a number, all divided by five”.

- 3) Calculate $7^2 - 4(5 - 2) =$

- 4) Write down the coordinates of point E.

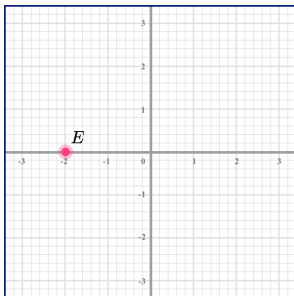


- 5) Plot and label the points: A (0, -3) (-3.5, 0)

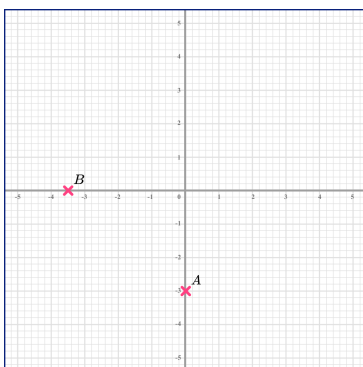


Week 2: Day 5 Answers

- 1) Find the lowest common multiple (LCM) of 6 and 15. **30**
-
- 2) Write an algebraic expression that means “three added to a number, all divided by five”. **$\frac{n + 3}{5}$**
-
- 3) Calculate $7^2 - 4(5 - 2) =$ **$49 - 4 \times 3$**
 $= 49 - 12$
 $= 37$
-
- 4) Write down the coordinates of point E. **$(-2, 0)$**



- 5) Plot and label the points: A $(0, -3)$ B $(-3.5, 0)$



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