

## Week 2

### This week in a nutshell:

Questions 1,2,3 and 5 do not feature any new skills. Question 4 provides a great opportunity to talk about inverses and efficient calculation methods. Emphasis on including units with the correct dimensions is a good idea at this elementary stage.

**Question 1:** Writing a fraction as a decimal number

**Question 2:** Completing sequences

**Question 3:** Integer calculation

**Question 4:** Using area to find missing lengths

**Question 5:** Identifying multiples

The questions aim to develop and deepen understanding over the week. Due to the necessity of the topics covered this week, there is an emphasis on the interchangeability of command words, and language flexibility. It may be worth taking some extra time this week to make sure your students are developing their mathematical literacy.

### This week's ideas for class discussion include:

Question 1: **Writing a fraction as a decimal number**

- Are there any advantages of writing a number as a decimal instead of a fraction?
- Can you think of any numbers that are better represented as fractions instead of decimals?

Question 2: **Completing sequences**

- What is a term-to-term rule?
- How does a term-to-term rule change when you progress forwards/backwards along a sequence?

Question 3: **Integer calculation**

- What different methods of long multiplication do you know?
- Which method do you prefer and why?

Question 4: **Using area to find missing lengths**

- How would you describe area to a student in primary school?
- Could you write a definition of area using mathematical terminology?

Question 5: **Circle terminology**

- What rules of divisibility can you remember from last term?

## Week 2: Day 1

1) Write  $\frac{83}{100}$  as a decimal.

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2) Find the next two terms of this sequence:

5, 8, 11, 14,     ,     , ...

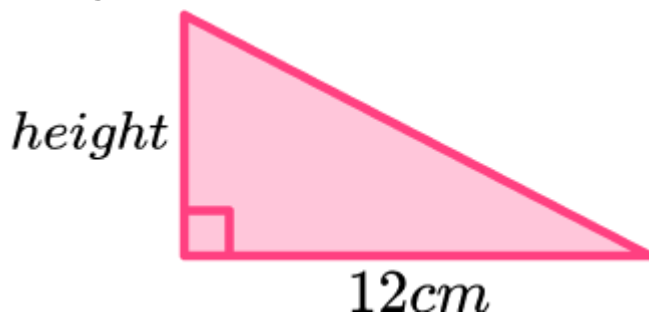
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3 Calculate:

$$273 + 415$$

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4) The area of this triangle is  $42\text{cm}^2$ . What is the height of the triangle?



5) Which number is a multiple of 3?

455

817

582

## Week 2: Day 1 Answers

- 1) Write  $\frac{83}{100}$  as a decimal.

0.83

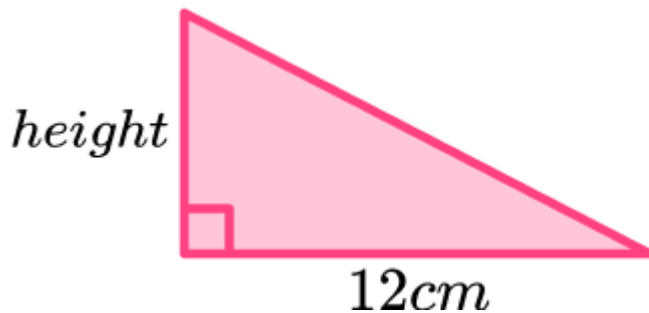
- 2) Find the next two terms of this sequence:

5, 8, 11, 14, 17, 20, ...

- 3 Calculate:

$$273 + 415 = 688$$

- 4) The area of this triangle is  $42\text{cm}^2$ . What is the height of the triangle? 7cm



- 5) Which number is a multiple of 3?

455

817

582

## Week 2: Day 2

1) Write  $\frac{2}{5}$  as a decimal.

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2) Find the next two terms of this arithmetic sequence:

17, 11, 5, , , ...

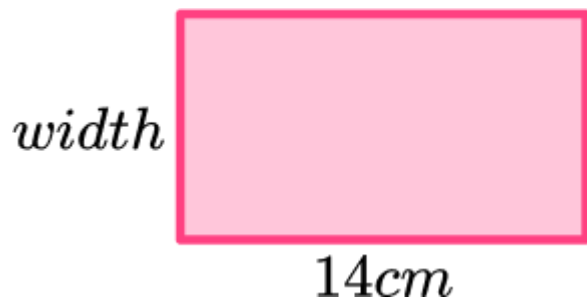
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3) Calculate:

$628 - 336$

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4) The area of this rectangle is  $112\text{cm}^2$ . What is the width of the rectangle?



5) Which number is a multiple of 4?

1758

1134

1352

## Week 2: Day 2 Answers

- 1) Write  $\frac{2}{5}$  as a decimal.

0.4

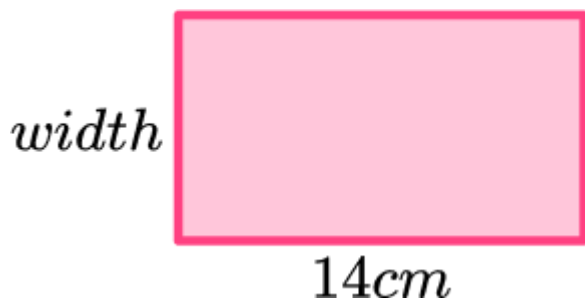
- 2) Find the next two terms of this arithmetic sequence:

17, 11, 5, - 1, - 7, ...

- 3) Calculate:

$$628 - 336 = 292$$

- 4) The area of this rectangle is  $112\text{cm}^2$ . What is the width of the rectangle?  
8cm



- 5) Which number is a multiple of 4?

1758

1134

1352

## Week 2: Day 3

1) Write  $\frac{7}{20}$  as a decimal.

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2) Find the missing terms in the sequence:

, , 29, 26, 23, 20, ...

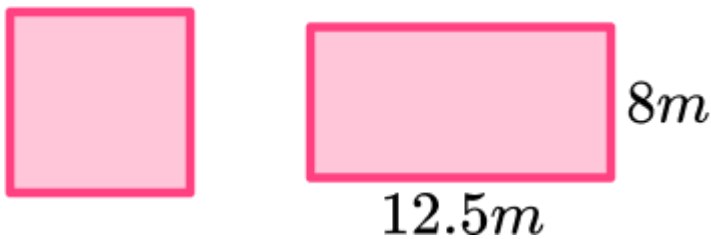
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3) Calculate:

$$27 \times 48$$

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4) The square on the left has the same area as the rectangle. What is the side length of the square?



5) Which number is a multiple of 6?

642

704

676

## Week 2: Day 3 Answers

1) Write  $\frac{7}{20}$  as a decimal. **0.35**

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2) Find the missing terms in the sequence:

**35, 32**, 29, 26, 23, 20, ...

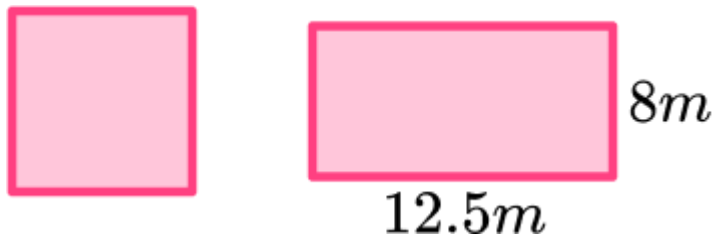
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3) Calculate:

$$27 \times 48 = \mathbf{1296}$$

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4) The square on the left has the same area as the rectangle. What is the side length of the square? **10m**



5) Which number is a multiple of 6?

642

704

676

## Week 2: Day 4

1) Write  $\frac{57}{25}$  as a decimal.

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2) Find the missing terms in the sequence:

3.5,     ,     , 14, 17.5, ...

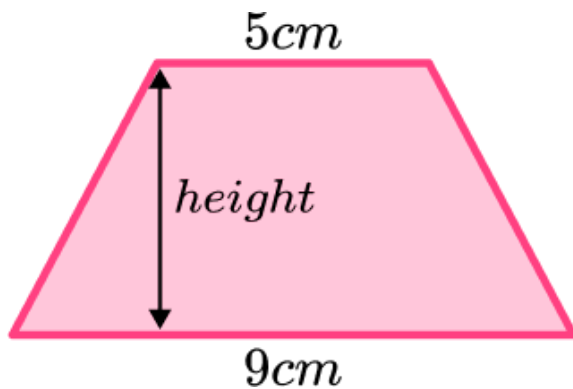
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3) Calculate:

$$689 \div 13$$

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4) The area of this trapezium is  $49\text{cm}^2$ . What is the height of this trapezium?



5) Which number is a multiple of 11?

2386

2343

2320



## Week 2: Day 4 Answers

- 1) Write  $\frac{57}{25}$  as a decimal.

2.28

- 2) Find the missing terms in the sequence:

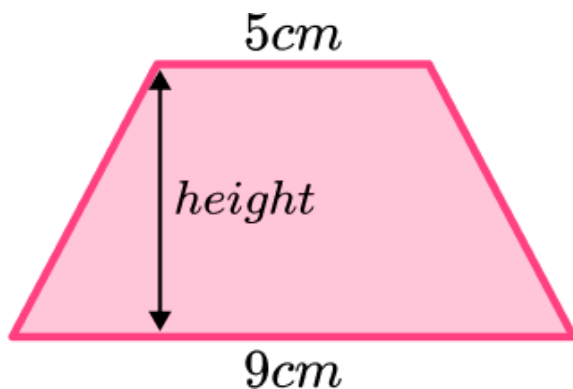
3.5, 7, 10.5, 14, 17.5, ...

- 3) Calculate:

$$689 \div 13 = 53$$

- 4) The area of this trapezium is  $49\text{cm}^2$ . What is the height of this trapezium?

7cm



- 5) Which number is a multiple of 11?

2386

2320

2343

## Week 2: Day 5

1) Write  $\frac{5}{8}$  as a decimal.

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2) Find the missing terms in the sequence:

3, - 1, , , - 13, ...

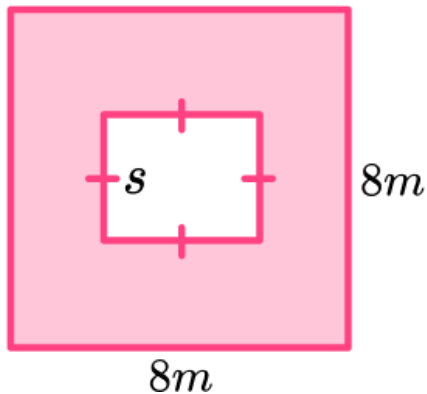
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3) Calculate:

$$519 - 94 + 118$$

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4) The shaded area is  $48m^2$ . What is the length of side  $s$ ?



5) Which number is a multiple of 7?

589

623

643

## Week 2: Day 5 Answers

1) Write  $\frac{5}{8}$  as a decimal. **0.625**

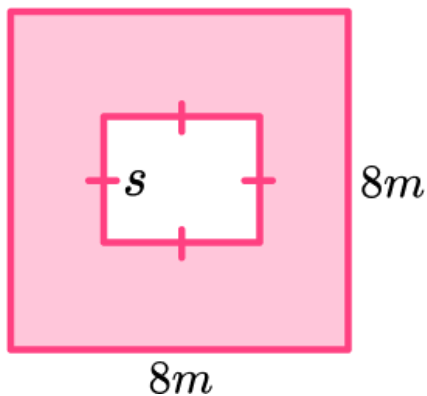
2) Find the missing terms in the sequence:

3, − 1, − **5**, − **9**, − 13, ...

3) Calculate:

$$519 - 94 + 118 = \mathbf{543}$$

4) The shaded area is  $48m^2$ . What is the length of side  $s$ ? **4m**



5) Which number is a multiple of 7?

589

**623**

643

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