Year 6 Maths Activity Mat

Section 1

Use these clues to find the number:

- It is less than 1 000.
- It is a multiple of 5.
- All of the digits are odd.
- The first and last digits add up to 12.
- The tens digit is the largest digit.

Section 2

Calculate:

```
    1   0   4   2
  x         1   3
_____

_____
```

Section 3

A school library has 2498 books. 329 books are on loan, and 1983 are in the library. The rest are missing. How many books are missing?

Section 4

Calculate:

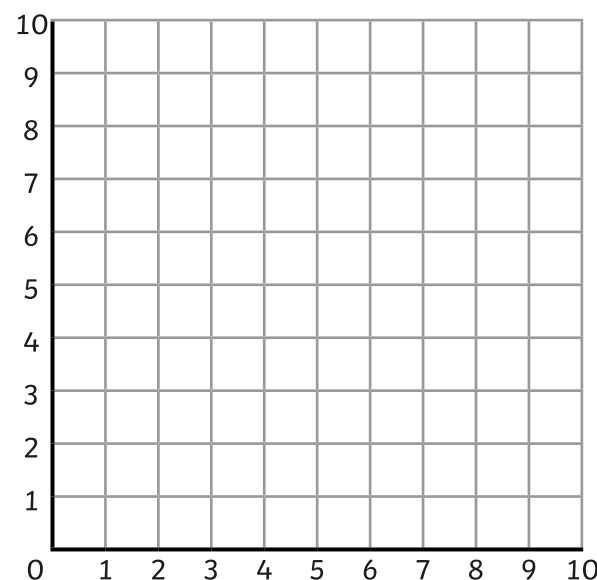$\frac{1}{3} \div 2 =$

$\frac{1}{2} \div 3 =$

Section 5

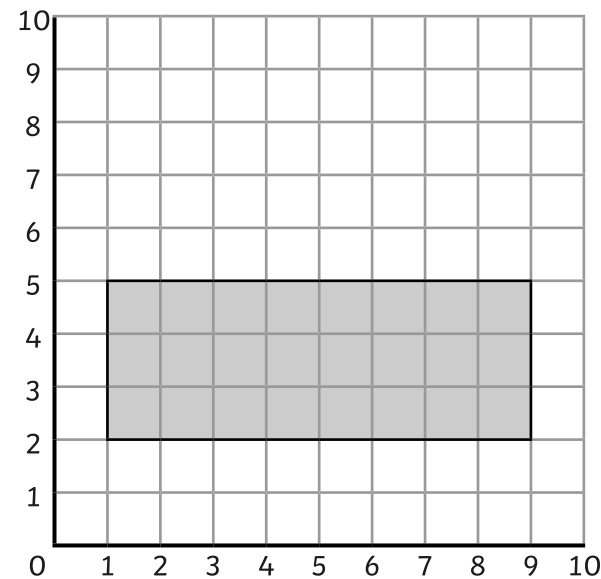50% of a class are boys. What fractions of the class are boys?

Section 6

A piece of string 3m long is cut into 12 equal pieces. How long is each piece in metres?

Section 7

Draw a rectangle on this coordinates grid using the coordinates: (1,2) (9,2) (1,5) (9,5).

Section 8

a and **b** are whole numbers between 3 and 7. Write all the calculations showing the possible values of a and b where:

$a + b = 10$

Year 6 Maths Activity Mat: 5

Answers

Section 1

Use these clues to find the number:

- It is less than 1 000.
- It is a multiple of 5.
- All of the digits are odd.
- The first and last digits add up to 12.
- The tens digit is the largest digit.

| **795** |

Section 2

Calculate:

```
    1   0   4   2
  x         1   3
  _____
    3   1   2   6
  1   0   4   2   0
  _____
  1   3   5   4   6
```

Section 3

A school library has 2498 books. 329 books are on loan, and 1983 are in the library. The rest are missing. How many books are missing?

| **186 books** |

Section 4

Calculate:

$\frac{1}{3} \div 2 =$ | $\frac{1}{6}$ |

$\frac{1}{2} \div 3 =$ | $\frac{1}{6}$ |

Section 5

50% of a class are boys. What fractions of the class are boys?

| $\frac{1}{2}$ |

Section 6

A piece of string 3m long is cut into 12 equal pieces. How long is each piece in metres?

| **0.25m** |

Section 7

Draw a rectangle on this coordinates grid using the coordinates: (1,2) (9,2) (1,5) (9,5).

Section 8

a and **b** are whole numbers between 3 and 7. Write all the calculations showing the possible values of a and b where:

$$a + b = 10$$

**a = 6, b = 4,
a = 5, b = 5;
a = 4, b = 6**

Year 6 Maths Activity Mat

Section 1

Use these clues to find the number:

- The number has 6 digits.
- The number is less than 300 000.
- 10 is a factor of the number.
- The hundred thousands and ten thousands digit are the same and are odd.
- The tens digit is a cube number and is one more than the thousands digit.
- The sum of the hundreds and the thousands digits is 10.

Section 2

Calculate:

```
    4   2   8   1
  x         2   3
  _____

  _____
```

Section 3

A library has 2498 books. 1134 are fiction. The rest are non-fiction. 272 of the non-fiction are on loan, and 1017 are in the library, and the rest are missing. How many non-fiction books are missing?

Section 4

Calculate:

$\frac{1}{2} \div 5 =$

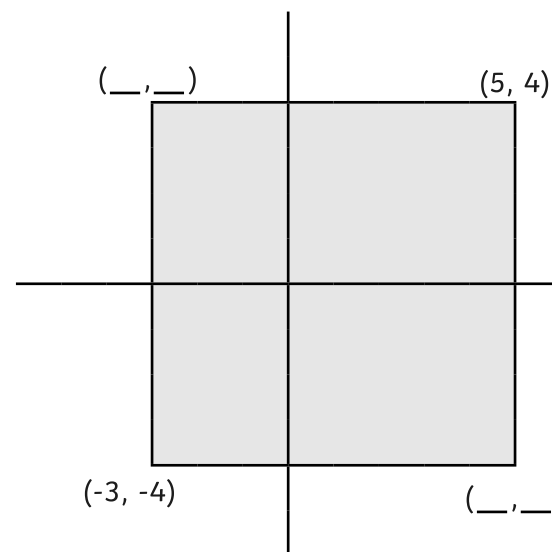$\frac{3}{4} \div 5 =$

Section 5

25% of a class are wearing trainers. What fraction are not wearing trainers?

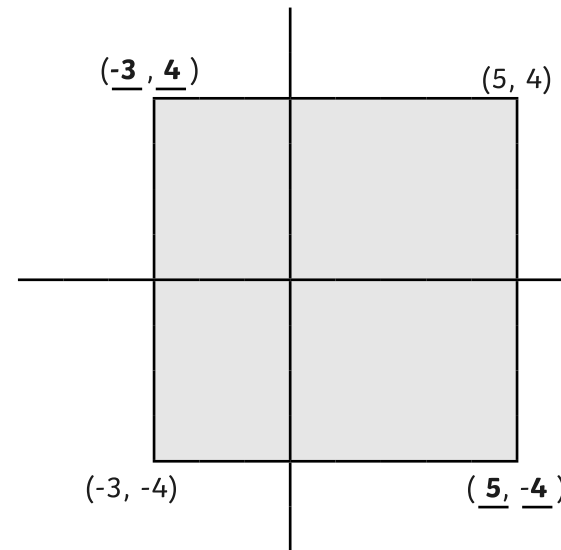## Section 6

A length of timber is 2400mm long. It is divided into 8 equal pieces. How long is each piece in metres?

Section 7

Write the missing coordinates for this rectangle.

(__ , __)   (5, 4)

(-3, -4)   (__ , __)

Section 8

a and **b** are whole numbers between 7 and 13. Write all the calculations showing the possible values of **a** and **b** where:

a + b = 20

Year 6 Maths Activity Mat: 5

Answers

Section 1

Use these clues to find the number:

- The number has 6 digits.
- The number is less than 300 000.
- 10 is a factor of the number.
- The hundred thousands and ten thousands digit are the same and are odd.
- The tens digit is a cube number and is one more than the thousands digit.
- The sum of the hundreds and the thousands digits is 10.

117 380

Section 2

Calculate:

```
      4   2   8   1
  x           2   3
  ─────────────────
  1   2   8   4   3
8   5   6   2   0
  ─────────────────
9   8   4   6   3
```

Section 3

A library has 2498 books. 1134 are fiction. The rest are non-fiction. 272 of the non-fiction are on loan, and 1017 are in the library, and the rest are missing. How many non-fiction books are missing?

75 books

Section 6

A length of timber is 2400mm long. It is divided into 8 equal pieces. How long is each piece in metres?

0.3m

Section 4

Calculate:

$\frac{1}{2} \div 5 = \boxed{\frac{1}{10}}$

$\frac{3}{4} \div 5 = \boxed{\frac{3}{20}}$

Section 7

Write the missing coordinates for this rectangle.

(**-3**, **4**)   (5, 4)

(-3, -4)   (**5**, **-4**)

Section 5

25% of a class are wearing trainers. What fraction are not wearing trainers?

$\boxed{\frac{3}{4}}$

Section 8

a and **b** are whole numbers between 7 and 13. Write all the calculations showing the possible values of **a** and **b** where:

$$a + b = 20$$

a = 12, b = 8;
a = 11, b = 9;
a = 10, b = 10;
a = 9, b = 11;
a = 8, b = 12

Year 6 Maths Activity Mat

Section 1

Use these clues to find the number:

- This is a 7-digit number.
- 3 of the digits are repeated.
- The number is less than three million.
- The millions digit is even and unique in this number.
- Two of the digits have no value.
- The hundred thousands digit is eight times the ones digit.

Section 2

Find the missing numbers in this calculation:

		5	0		7
		x		2	
	4	5	6	9	3
1	0	1	5	4	0
1	4	7	2	3	3

Section 3

A library has 2498 books. 1134 are fiction books. A quarter of the non-fiction books are about sport. 68 of these are on loan, and 267 are in the library. The remaining sports books are missing. How many sports books are missing?

Section 4

Calculate:

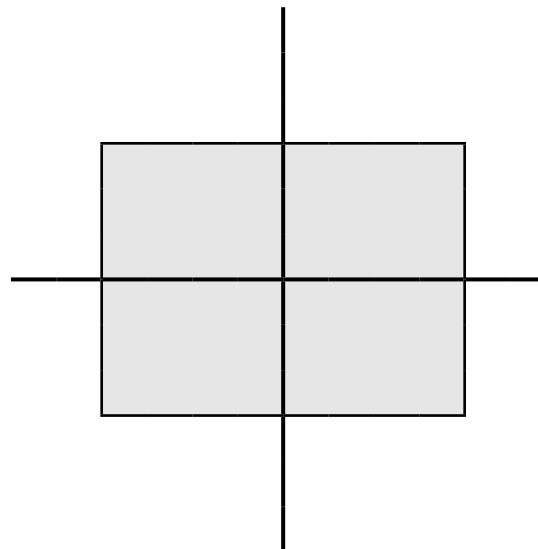$\frac{3}{5} \div 2 =$

$\frac{3}{4} \div 4 =$

Section 5

25% of a class are wearing trainers. One third of those not wearing trainers are boys. What percentage of the whole class are girls not wearing trainers?

Section 6

A builder needs 4 equal lengths of timber, each 0.75 m. Timber is sold in lengths of 2400 mm. How many lengths are needed? Explain what could be left.

Section 7

Write possible missing coordinates for this rectangle.

Section 8

a and **b** are whole numbers between 3 and 8. Write all the calculations showing the possible values of **a** and **b** where:

$$2a + b = 15$$

twinkl ★★★

twinkl.co.uk

Answers

Section 1

Use these clues to find the number:

- This is a 7-digit number.
- 3 of the digits are repeated.
- The number is less than three million.
- The millions digit is even and unique in this number.
- Two of the digits have no value.
- The hundred thousands digit is eight times the ones digit.

2 801 801

Section 2

Find the missing numbers in this calculation:

		5	0	**7**	7
		x		2	**9**
		4	5	6	9	3
1	0	1	5	4	0
1	4	7	2	3	3

Section 3

A library has 2498 books. 1134 are fiction books. A quarter of the non-fiction books are about sport. 68 of these are on loan, and 267 are in the library. The remaining sports books are missing. How many sports books are missing?

6 books

Section 4

Calculate:

$\frac{3}{5} \div 2 =$ **$\frac{3}{10}$**

$\frac{3}{4} \div 4 =$ **$\frac{3}{16}$**

Section 5

25% of a class are wearing trainers. One third of those not wearing trainers are boys. What percentage of the whole class are girls not wearing trainers?

50%

Section 6

A builder needs 4 equal lengths of timber, each 0.75 m. Timber is sold in lengths of 2400 mm. How many lengths are needed? Explain what could be left.
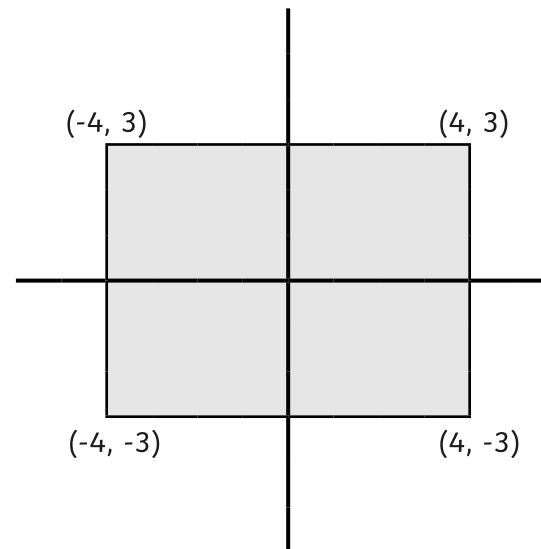
2 lengths needed

2 smaller lengths will be left: either 150mm and 1650, or 2 equal lengths of 900mm

Section 7

Write possible missing coordinates for this rectangle.

Various Answers. E.g.

(-4, 3)   (4, 3)

(-4, -3)   (4, -3)

Section 8

a and **b** are whole numbers between 3 and 8. Write all the calculations showing the possible values of **a** and **b** where:

$2a + b = 15$

a = 4, b = 7; a = 5, b = 5