Thursday- maths

Match the numbers in words to the numbers in the grid.

Write down the number that does not match.

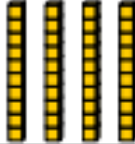Seven thousand, nine hundred and seventy-seven

Seven thousand, nine hundred and forty-nine

Four thousand, seven hundred and ninety-four

Nine thousand, seven hundred and forty-four

Seven thousand, four hundred and ninety-four

Answers

Match the numbers in words to the numbers in the grid.

Write down the number that does not match.

Seven thousand, nine hundred and seventy-seven

Seven thousand, nine hundred and forty-nine

Four thousand, seven hundred and ninety-four

Nine thousand, seven hundred and forty-four

Seven thousand, four hundred and ninety-four

7,000

700

90

100 100
100 100

7

LO:To divide a 3 digit number by a 1 digit number

Each sheep needs 3 squares to graze on.
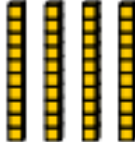
Hint: Count the squares along and down… how many squares altogether?

1 a) How many sheep can graze in the farmer's field?

b) A cow needs 4 squares to graze on.

How many cows can graze in the field?

LO:To divide a 3 digit number by a 1 digit number

a) $11 \times 12 = 132$

For the amount of sheep…

You can partition 132 in a variety of ways!
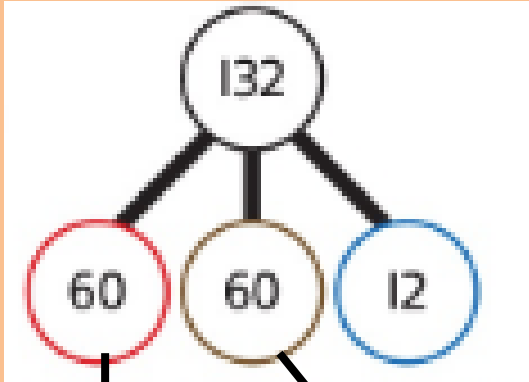
$60 \div 3 = 20$ $60 \div 3 = 20$ $12 \div 3 = 4$

$$132 \div 3 = 44$$

$$20 + 20 + 4 = 44$$

$120 \div 3 = 40$ $12 \div 3 = 4$

$30 \div 3 = 10$ $30 \div 3 = 10$ $30 \div 3 = 10$ $30 \div 3 = 10$ $12 \div 3 = 4$

b)

$$132$$

$$80 \qquad 40 \qquad 12$$
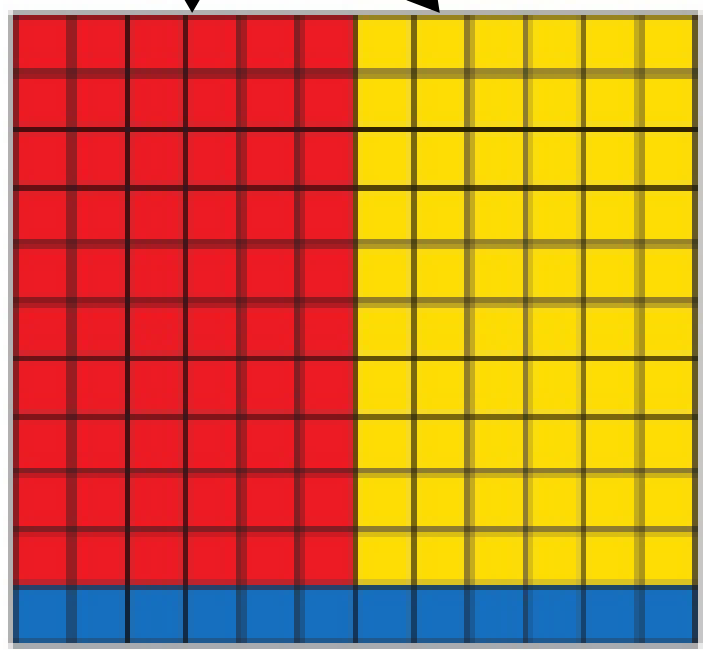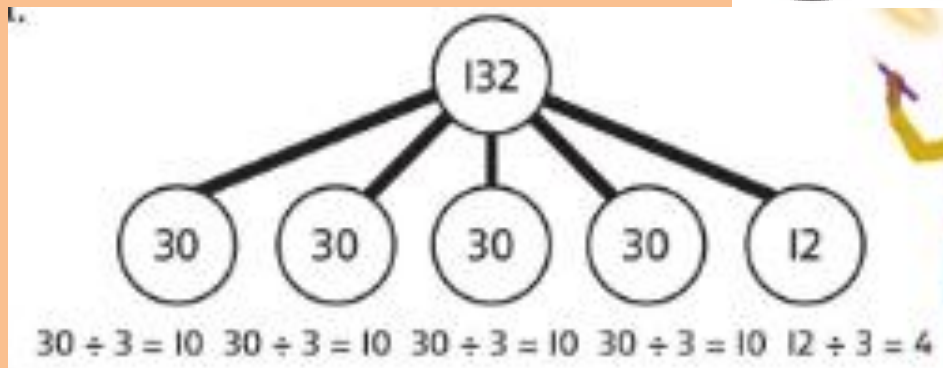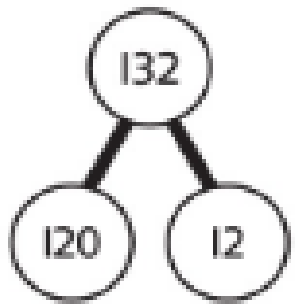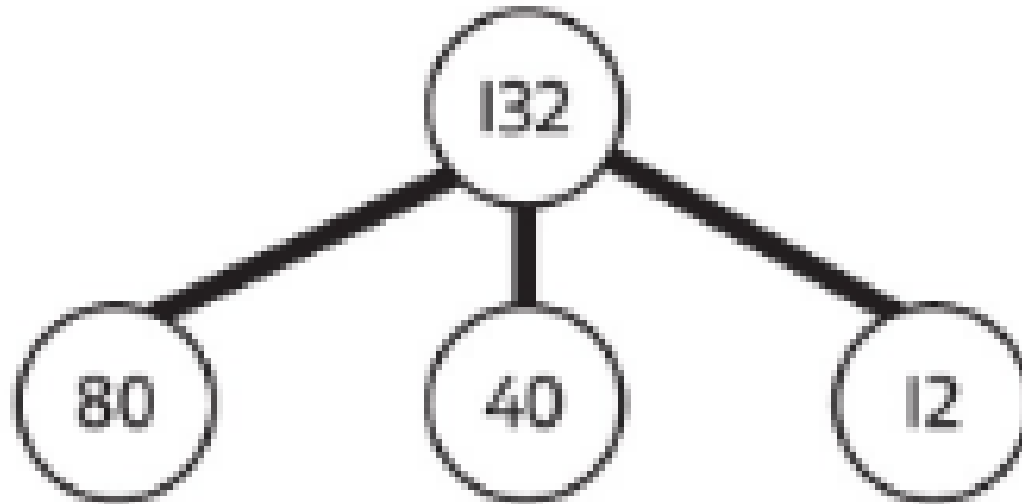
$$80 \div 4 = 20 \quad 40 \div 4 = 10 \quad 12 \div 4 = 3$$

$$132 \div 4 = 33$$

33 cows can graze in the field.

Partition your number into smaller numbers that you know your divisor will divide into easily. For example 4 shares well into 80, 40 and 12!

LO:To divide a 3 digit number by a 1 digit number

Find the answer to 146 ÷ 2.

146

100   40   6
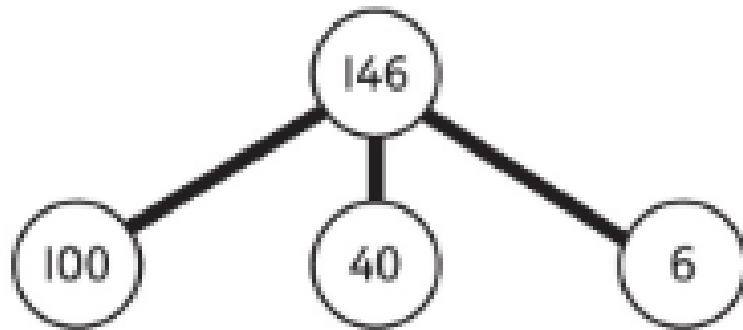
100 ÷ 2 = ☐   40 ÷ 2 = ☐   6 ÷ 2 = ☐

☐ + ☐ + ☐ = ☐   Use the part-whole model to find the answer to 185 ÷ 5

146 ÷ 2 = ☐

185

150   35
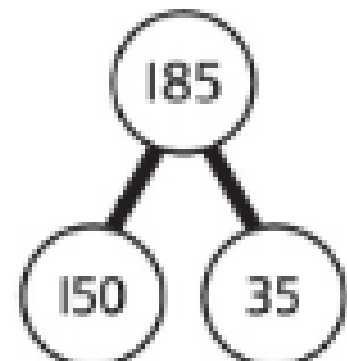
LO:To divide a 3 digit number by a 1 digit number

Answers

Find the answer to 146 ÷ 2.
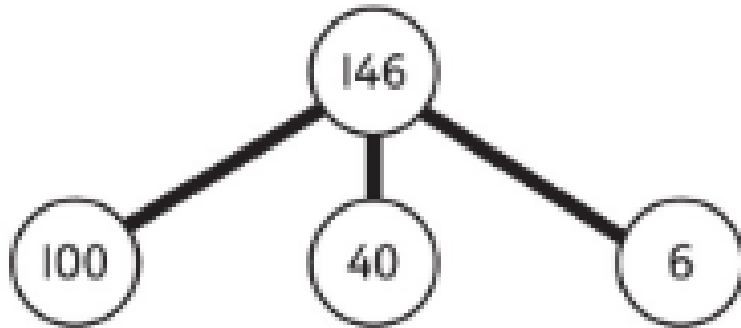
$100 ÷ 2 = \boxed{50}$ $40 ÷ 2 = \boxed{20}$ $6 ÷ 2 = \boxed{3}$

$\boxed{50} + \boxed{20} + \boxed{3} = \boxed{73}$

$146 ÷ 2 = \boxed{73}$

Use the part-whole model to find the answer to 185 ÷ 5.
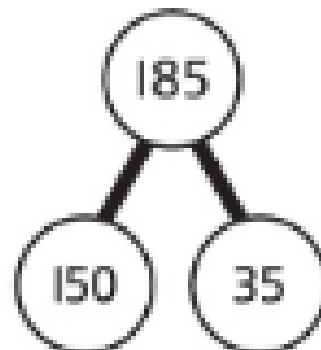
150 ÷ 5 = 30
35 ÷ 5 = 7
30 + 7 = 37
185 ÷ 5 = 37

LO:To divide a 3 digit number by a 1 digit number

Success Criteria

- Read question/calculation carefully

- Look at divisor (number you are sharing by)

- Partition dividend (number you are sharing into)

- Recombine (add together) subtotals to find final answer

Fluency – work these out in your books

Here are three different ways of partitioning 168 ÷ 6.
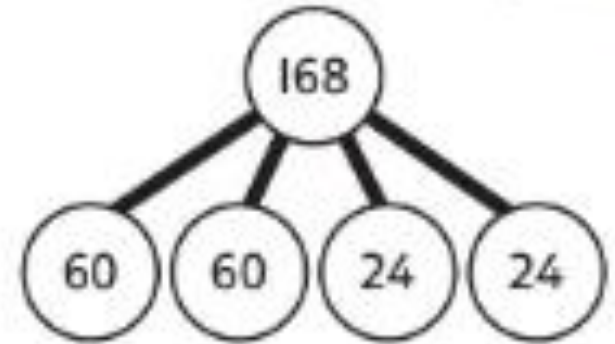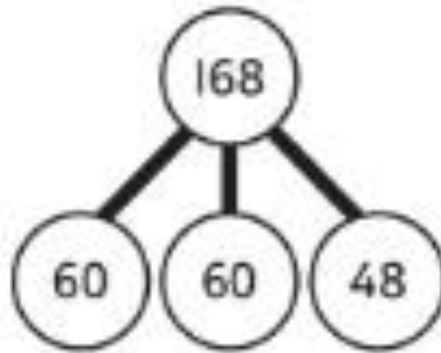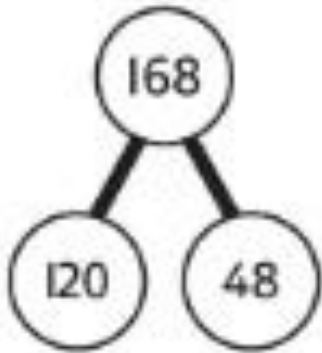
a) Choose a partition and use it to work out 168 ÷ 6.

b) Find three different ways of partitioning 246.

c) Use one of your partitions to work out 246 ÷ 3.

LO: LO To divide a 3 digit number by a 1 digit number

a) Choose a partition and use it to work out 168 ÷ 6.

$60 ÷ 6 = 10$
$60 ÷ 6 = 10$
$48 ÷ 6 = 8$
$10 + 10 + 8 = 28$
168 ÷ 6 = 28

Fluency
Mark your
Answers

Here is a few examples! Remember, it helps to use partitioned numbers that your divisor (3) will share well in to!

b) Find three different ways of partitioning 246.
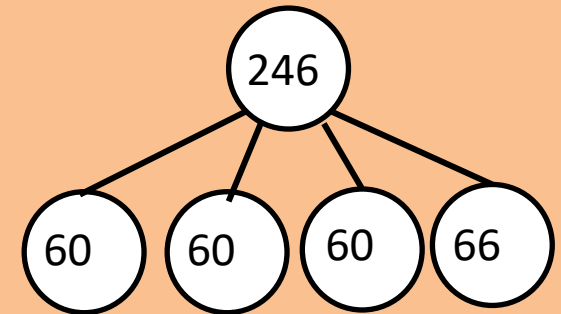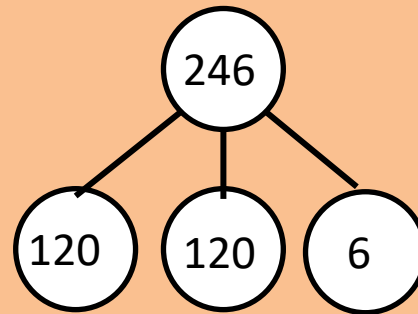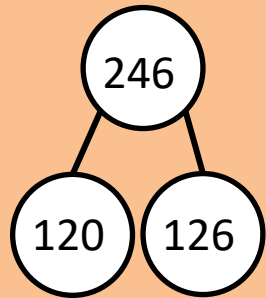
c) Use one of your partitions to work out 246 ÷ 3.

$120÷3=40$ $126÷3=41$ $40 +41 =82$ $246÷3=82$

LO: To divide a 3 digit number by a 1 digit number

Reasoning

Work this out?

Dexter is calculating 208 ÷ 8 using part-whole models.
Can you complete each model?

208 ÷ 8
=

80 ÷ 8
=

80 ÷ 8
=

48 ÷ 8
=

208 ÷ 8
=

160 ÷ 8
=

40 ÷ 8
=

8 ÷ 8
=

208 ÷ 8
=

160 ÷ 8
=

48 ÷ 8
=
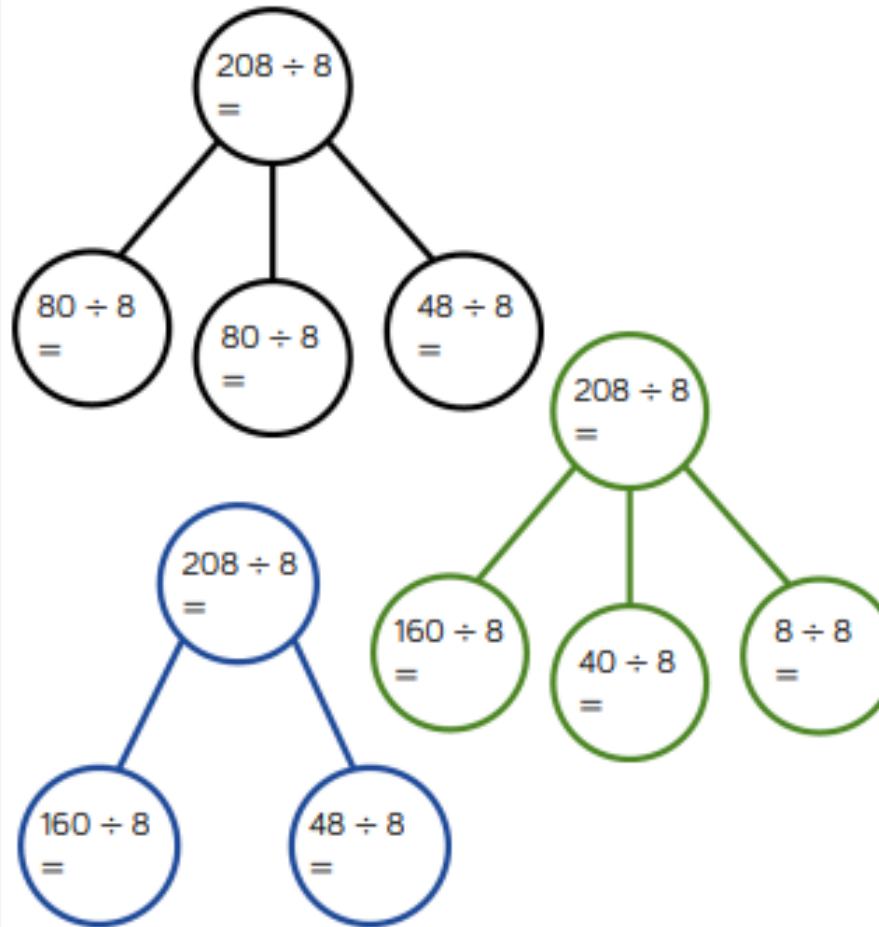
How many part-whole models can you make to calculate 132 ÷ 4?

LO: To divide a 3 digit number by a 1 digit number

Reasoning – Mark your Answer

$208 \div 8 = 26$

$80 \div 8 = 10$

$48 \div 8 = 6$

$160 \div 8 = 20$

$40 \div 8 = 5$

$8 \div 8 = 1$

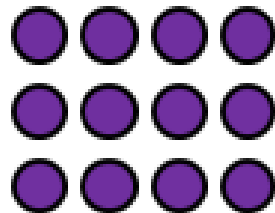Children can then make a range of part-whole models to calculate $132 \div 4$

e.g.

$100 \div 4 = 25$

$32 \div 4 = 8$

Problem Solving – work this out?

You have 12 counters and the place value grid. You must use all 12 counters to complete the following.

Hundreds	Tens	Ones

Create a 3-digit number divisible by 2

Create a 3-digit number divisible by 3

Create a 3-digit number divisible by 4

Create a 3-digit number divisible by 5

Can you find a 3-digit number divisible by 6, 7, 8 or 9?

2: Any even number

3: Any 3-digit number (as the digits add up to 12, a multiple of 3)

4: A number where the last two digits are a multiple of 4

5: Any number with 0 or 5 in the ones column.

Possible answers

6: Any even number

7: 714, 8: 840

9: impossible