



20.01.21

IALT: divide 3 digit numbers by 1 digit with remainders.

$8 \times 3 =$

$8 \times 7 =$

$\underline{\quad} \times 8 = 8$

$\underline{\quad} \times 8 = 24$

$\underline{\quad} \times 8 = 16$

$\underline{\quad} \times 8 = 40$

$32 \div 8 =$

$48 \div 8 =$

$56 \div 8 =$

$88 \div 8 =$

$0 \div 8 =$

Challenge:

There are 63 pencils.

I share them with 7 children - how many pencils do they get each?

<https://www.topmarks.co.uk/mathsgames/daily10>



20.01.21

IALT: divide 3 digit numbers by 1 digit with remainders.

$8 \times 3 =$

24

$8 \times 7 =$

56

$\underline{\quad} \times 8 = 8$

1

$\underline{\quad} \times 8 = 24$

3

$\underline{\quad} \times 8 = 16$

2

$\underline{\quad} \times 8 = 40$

5

$32 \div 8 =$

4

$48 \div 8 =$

6

$56 \div 8 =$

7

$88 \div 8 =$

11

$0 \div 8 =$

0

Challenge:

There are 63 pencils.

I share them with 7 children - how many pencils do they get each?

9

<https://www.topmarks.co.uk/mathsgames/daily10>

Daily Counting

8

6

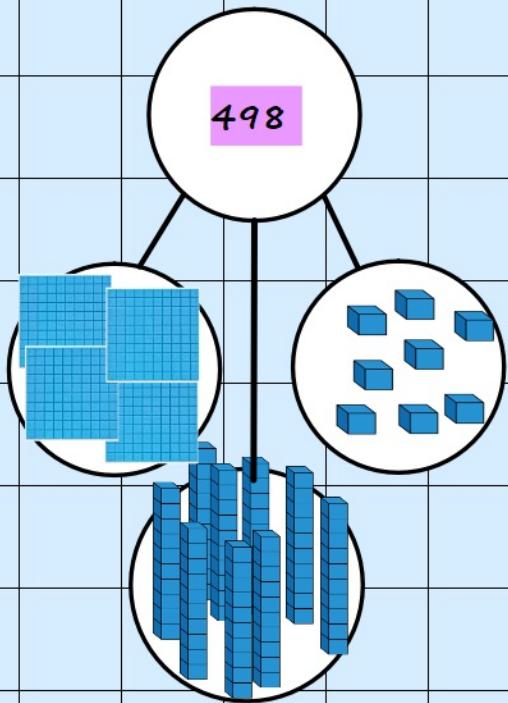
7



$$498 \div 4 =$$

Sometimes we have to divide numbers that are tricky and will have reminders...

Let's start by partitioning the number to help us.



Does 4 go into 400? Yes, 100 times.

Does 4 go into 90? No

Does 4 go into 8? Yes

What is the next 10 before 90? 80

Does 4 go into 80? Yes, 20 times.

Does 4 go into 18? Yes, with 2 left over...

$$400 \div 4 = 100$$

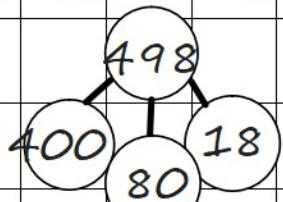
$$80 \div 4 = 20$$

$$18 \div 4 = 4 \text{ r}2$$

To use our formal method we would lay out the question like this...

1. NUMBER SENTENCE

$$498 \div 4 =$$



\div	400	80	18
4	100	20	4r2

$$100 + 20 + 4r2 = 124r2$$

3. Grid method

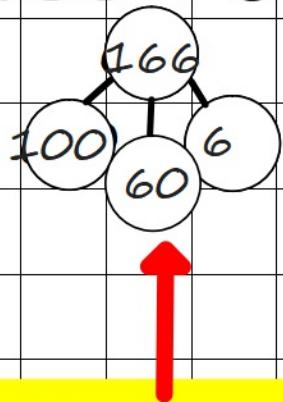
4. Add answer

2. Show me how you partitioned

PARTITION
DIVIDE
ADD

When you are doing your questions, layout your work like this:

$$166 \div 5 =$$



1. NUMBER SENTENCE

$$\begin{array}{r} \div 100 \quad 60 \quad 6 \\ \hline 5 \quad | \quad 20 \quad 12 \quad 1\text{r}1 \end{array}$$

3. Grid method

$$20 + 12 + 1\text{r}1 = 33\text{r}1$$

4. Add answer

2. Show me how you partitioned

PARTITION
DIVIDE
ADD

TASK: divide these 3-digit numbers

Mild:

Spicy:

HHH:

1. $429 \div 3 =$

2. $560 \div 4 =$

3. $615 \div 5 =$

4. $764 \div 4 =$

5. $288 \div 3 =$

6. $670 \div 5 =$

7. $488 \div 2 =$

8. $920 \div 4 =$

9. $363 \div 3 =$

10. $510 \div 5 =$

11. $504 \div 4 =$

12. $642 \div 6 =$

13. $752 \div 8 =$

14. $558 \div 6 =$

15. $728 \div 8 =$

16. $592 \div 4 =$

17. $684 \div 2 =$

18. $328 \div 4 =$

19. $648 \div 8 =$

20. $684 \div 6 =$

21. $954 \div 9 =$

22. $637 \div 7 =$

23. $678 \div 6 =$

24. $665 \div 7 =$

25. $945 \div 9 =$

26. $864 \div 8 =$

27. $574 \div 7 =$

28. $708 \div 6 =$

29. $936 \div 9 =$

30. $623 \div 7 =$

Mild:

- 1 Find the answer to $146 \div 2$.

$$\begin{array}{c} 146 \\ \diagdown \quad \diagup \\ 100 \quad 40 \\ \diagdown \quad \diagup \\ 6 \end{array}$$

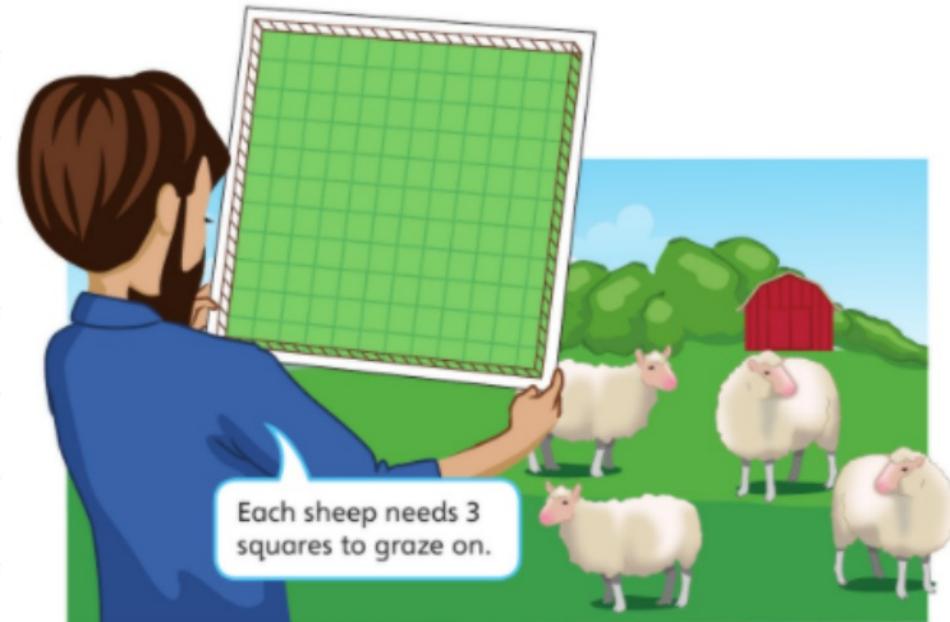
$100 \div 2 = \boxed{}$ $40 \div 2 = \boxed{}$ $6 \div 2 = \boxed{}$

$$\begin{array}{r} \boxed{} + \boxed{} + \boxed{} = \boxed{} \\ 146 \div 2 = \boxed{} \end{array}$$

- 2 Use the part-whole model to find the answer to $185 \div 5$.

$$\begin{array}{c} 185 \\ \diagdown \quad \diagup \\ 150 \quad 35 \end{array}$$

Spicy:



- 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?

ANSWERS:

Mild:

Spicy:

HHH:

1. 143

2. 140

3. 123

4. 191

5. 96

6. 134

7. 244

8. 230

9. 121

10. 102

11. 126

12. 107

13. 94

14. 93

15. 91

16. 148

17. 342

18. 82

19. 81

20. 114

21. 106

22. 91

23. 113

24. 95

25. 105

26. 108

27. 82

28. 118

29. 104

30. 89

Mild:

Answers:

- 1 Find the answer to $146 \div 2$.

$$\begin{array}{c}
 146 \\
 / \quad \backslash \\
 100 \quad 40 \\
 100 \div 2 = 50 \quad 40 \div 2 = 20
 \end{array}$$

$6 \div 2 = 3$

$$\begin{array}{r}
 50 + 20 + 3 = 73 \\
 146 \div 2 = 73
 \end{array}$$

- 2 Use the part-whole model to find the answer to $185 \div 5$.

$$\begin{array}{c}
 185 \\
 / \quad \backslash \\
 150 \quad 35
 \end{array}$$

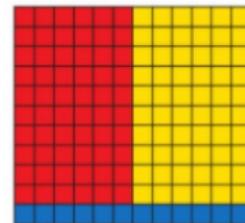
$= 37$

Spicy:

Share

a) $11 \times 12 = 132$

There are 132 squares in total.



$$\begin{array}{l}
 60 \div 3 = 20 \quad 60 \div 3 = 20 \quad 12 \div 3 = 4 \\
 132 \div 3 = 44
 \end{array}$$



I partitioned the number of squares in different ways. I got the same answer each time.

$$\begin{array}{l}
 132 \\
 / \quad \backslash \\
 120 \quad 12
 \end{array}$$

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

$20 + 20 + 4 = 44$

44 sheep can graze in the farmer's field.

$$\begin{array}{c}
 132 \\
 / \quad \backslash \quad / \quad \backslash \quad / \quad \backslash \\
 30 \quad 30 \quad 30 \quad 30 \quad 12
 \end{array}$$

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



b)

$$\begin{array}{c}
 132 \\
 / \quad \backslash \quad / \quad \backslash \\
 80 \quad 40 \quad 12
 \end{array}$$

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

33 cows can graze in the field.