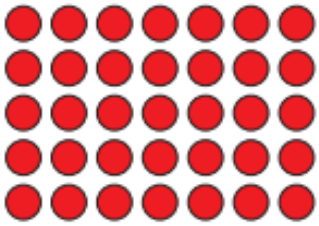
# 17.1.23

## The 7x table

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7 | 14 | 21 | 28 | | | | | | | | |
| 84 | 77 | 70 | | | | | | | | | | |

Write the equations that the array is showing.



_____ × _____ = _____

_____ × _____ = _____

_____ ÷ _____ = _____

_____ ÷ _____ = _____

$4 \times 7 = \square$ $\quad 9 \times 7 = \square$

$7 \times \square = 28$ $\quad 7 \times \square = 63$

$28 \div 7 = \square$ $\quad 63 \div 7 = \square$

Match the equations to their inverse partner.

| | |
|---|---|
| 8 × 7 = 56 | 28 ÷ 7 = 4 |
| 6 × 7 = 42 | 84 ÷ 7 = 12 |
| 12 × 7 = 84 | 42 ÷ 7 = 6 |
| 4 × 7 = 28 | 56 ÷ 7 = 8 |

$9 \times 7 \bigcirc 8 \times 7$

$9 \times \bigcirc 8 \times 7 + 7$

$9 \times \bigcirc 9 \times 7 + 7$

$9 \times 7 \bigcirc 10 \times 7 - 7$

*'Seven children are needed in each of the eight dance sections in the school assembly. Two children are also needed as narrators. How many children are needed altogether?'*

| ? | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 2 |

How else can you represent your answer?

Is the statement true or false?

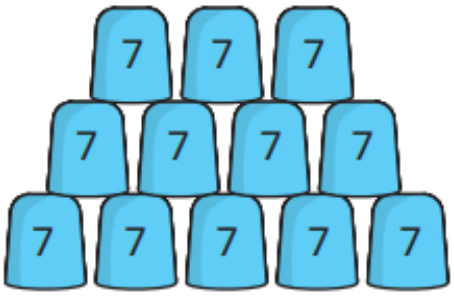
$6 \times 7 = 5 \times 7 + 5$

# 17.1.23

## The 7x table Challenge

Three children are playing a game.

They score 7 points for every cup they knock down.

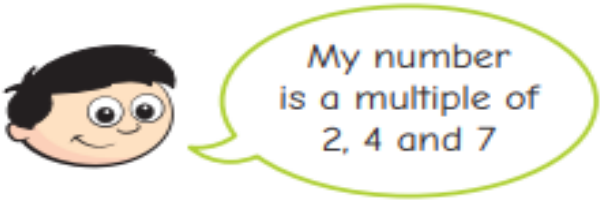



Here are their scores.

| | |
|---|---|
| Esther | 56 |
| Brett | 77 |
| Alex | 28 |

How many cups did each child knock down?

Dexter is thinking of a number less than 70




What number could Dexter be thinking of?

# 18.1.23

## The 11 x table

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11 | 22 | 33 | 44 | | | | | | | | |
| 132 | 121 | 110 | | | | | | | | | | |

Complete the sentences.

$2 \times 10 =$ _____ $2 \times 1 =$ _____

2 lots of 10 doughnuts = _____ 2 lots of 1 doughnut = _____

$2 \times 10 + 2 \times 1 = 2 \times 11 =$ _____ There are _____ doughnuts.

Fill in the equations. Remember to partition the 11.

$9 \times 11 = 9 \times 10 + 9 \times 1 =$ ☐ + ☐ = ☐

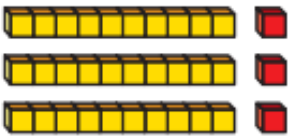
$8 \times 11 = 8 \times$ ☐ $+ 8 \times 1 =$ ☐ + ☐ = ☐

☐ $\times 11 = 3 \times 10 + 3 \times$ ☐ = ☐ + ☐ = ☐

| | ×11 |
|---|---|
| 0 | 0 |
| 1 | 11 |
| 2 | |
| 3 | 33 |
| | 44 |
| 5 | |
| 6 | |
| | 77 |
| | 88 |
| | 99 |
| 10 | |
| | 121 |
| 12 | |

What patterns do you notice?

Tommy is using base 10 to help him work out 3 × 11



$3 \times 11 = 33$

Use Tommy's method to work out the multiplications.

| | | |
|---|---|---|
| 5 × 11 | 8 × 11 | 7 × 11 |
| 10 × 11 | 6 × 11 | 12 × 11 |

Journal the answers to the equations using Tommy's method on the next page in your book.

Make the statements correct using

**< , > or =**

$9 \times 11$ ◯ $8 \times 11$

$9 \times 11$ ◯ $8 \times 11 + 11$

$9 \times 11$ ◯ $9 \times 11 + 11$

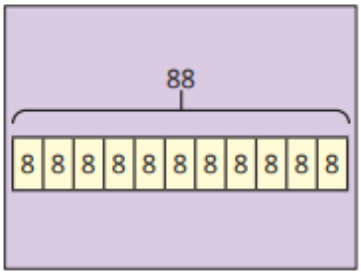
$9 \times 11$ ◯ $10 \times 11 - 11$

# 18.1.23

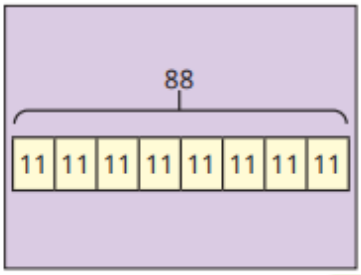
## The 11 x table Challenge

Match the word problems to the bar models.

Dora has 88 footballs.
She shares them equally into 11 bags.
How many footballs are in each bag?




Dora has 88 footballs.
She wants to put them into bags with 11 footballs in each bag.
How many bags does she use?




Explain your reasoning.

Can you make you own version of this question. You need to write the word problems and draw the bar models.

*'What is the relationship between these calculations?'*

$2 \times 11 = ?$ $4 \times 11 = ?$ $8 \times 11 = ?$

Can you add a diagram to help explain your reasoning?

# 19.1.23

## The 12 x table

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12 | 24 | 36 | 48 | | | | | | | | |
| 144 | 132 | 120 | | | | | | | | | | |

Make the statements correct using

**< , > or =**

$4 \times 12$ ◯ $6 \times 12$

$8 \times 12$ ◯ $12 \times 8$

$48 \div 12$ ◯ $72 \div 12$

| | |
|---|---|
| *'Stickers are sold in packs of twelve. Sam had three packs but has lost two stickers. How many stickers does he have now?'* | $12 \times 8$ |
| *'Stamps are sold in books of six or twelve. Janina buys three books of twelve stamps and a book of six stamps. How many stamps does she have?'* | $12 \times 3 - 2$ |
| *'Each month, Iniko gets £5 pocket money and £3 for delivering a newsletter. How much money does Iniko get in a year (twelve months)?'* | $12 \times 3 + 6$ |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 × | 1 | = | | | 0 | | | | | | | |
| | 3 | | | | 2 | | | | | | | |
| | 5 | | | | 4 | | | | | | | |
| | 7 | | | | 6 | × 12 = | | | | | | |
| | 9 | | | | 8 | | | | | | | |
| | 11 | | | | 10 | | | | | | | |
| | | | | | 12 | | | | | | | |

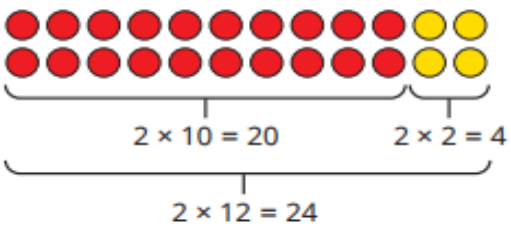
Complete the table.

| × | 3 | 6 | 12 |
|---|---|---|---|
| 3 | | | |
| 6 | | | |
| 12 | | | |

What connections do you notice between the 3, 6 and 12 times-tables?

Jack has made an array to help him work out 2 × 12

He has partitioned 12 into 10 and 2




Use Jack's method to work out the multiplications.

| | | |
|---|---|---|
| 5 × 12 | 8 × 12 | 7 × 12 |

Journal the answers to the equations using Jack's method on the next page in your book.

$8 \times \square = 96$ $\quad$ $12 \times \square = 84$

$96 \div 12 = \square$ $\quad$ $84 \div 12 = \square$

$72 \div 12 = \square$ $\quad$ $5 = \square \div 12$

19.1.23

# The 12 x table Challenge

Here are the prices of tickets to see a play.

| Adult | Child |
|---|---|
| £12 | £6 |

What possible combination of adults and children could attend if they spend £60?

How many possibilities are there?

*'Work systematically to write all the possible answers to this calculation. '*

$6 \times 12 >$ ☐ $\times 12 +$ ☐ $\times 12$

*'How is this calculation different?'*

$6 \times 12 \geq$ ☐ $\times 12 +$ ☐ $\times 12$

*'Will you get the same number of possible answers? Explain your thinking.'*

19.1.23

| × | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |

| × | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |