The 3 times-table

1 Complete the multiplications.
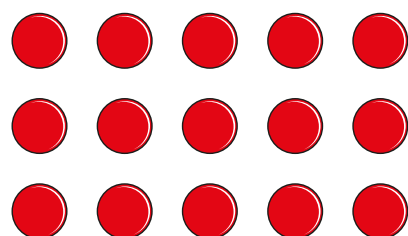
a)

$$\boxed{} \times \boxed{} = \boxed{}$$

b)

$$\boxed{} \times \boxed{} = \boxed{}$$

2 Dani makes an array using counters.

Write two multiplication and two division facts represented by the array.

$$\boxed{} \times \boxed{} = \boxed{}$$

$$\boxed{} \times \boxed{} = \boxed{}$$

$$\boxed{} \div \boxed{} = \boxed{}$$

$$\boxed{} \div \boxed{} = \boxed{}$$

3 Complete the number sentences.

a) $6 \times 3 = \boxed{}$

b) $3 \times \boxed{} = 27$

c) $\boxed{} \div 11 = 3$

d) $\boxed{} \div 3 = 5$

e) $12 \times 3 = \boxed{}$

f) $\boxed{} \times 3 = 0$

4 Complete the number sentences.

a) $2 \times 3 = \boxed{}$

$4 \times 3 = \boxed{}$

$8 \times 3 = \boxed{}$

b) $6 = 3 \times \boxed{}$

$12 = 3 \times \boxed{}$

$18 = 3 \times \boxed{}$

What patterns do you notice?

5 Write <, > or = to compare the statements.

a) $33 \div 11 \bigcirc 3$

b) $27 \bigcirc 30 \div 3$

c) $9 \div 3 \bigcirc 3 \times 6$

d) $6 \times 3 \bigcirc 6 \div 3$

e) $3 \times 6 \bigcirc 18 \div 3$

f) $0 \times 3 \bigcirc 3 \div 3$

6 Colour all the numbers in the 3 times-table.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

What two patterns do you notice?

7 Work out the missing values in each bar model.

a)

3	3	3	3	3	3

b)

36		
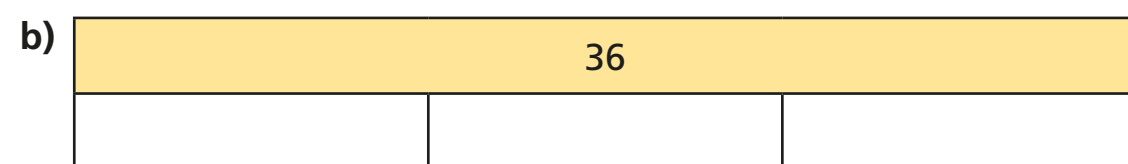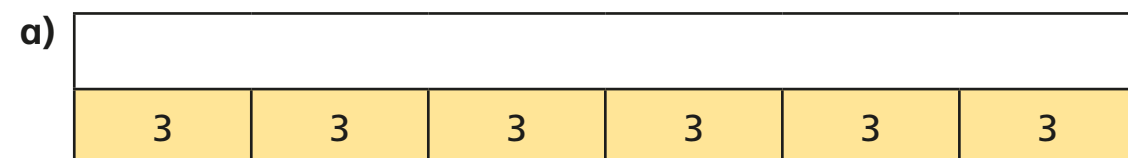
8 Mo has 7 packets of 3 stickers.

Eva has 3 packets of 9 stickers.

Who has the greatest number of stickers? _____

9 a) Complete the multiplications.

Are the answers odd or even? Tick your answer.

<div align="right">odd   even</div>

$1 \times 3 = 3$ ☐ ☐

$2 \times 3 = \boxed{}$ ☐ ☐

$3 \times 3 = \boxed{}$ ☐ ☐

$\boxed{} \times 3 = 12$ ☐ ☐

b) What would the next multiplication be?

$\boxed{} \times 3 = \boxed{}$

c) What do you notice about the products?

d) Will the product of 11×3 be odd or even? _____

10 Use the fact that $12 \times 3 = 36$ to work out the calculations.

$13 \times 3 = \boxed{}$

$3 \times 15 = \boxed{}$

$14 \times 3 = \boxed{}$

$24 \times 3 = \boxed{}$

How did you work this out?

Did you find the answers in the same way as your partner?

Multiply by 4

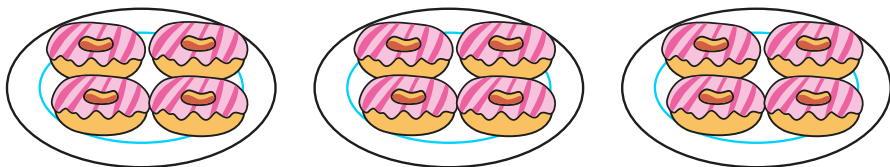**1** Complete the sentences.

a)

There are ☐ bags of pears.

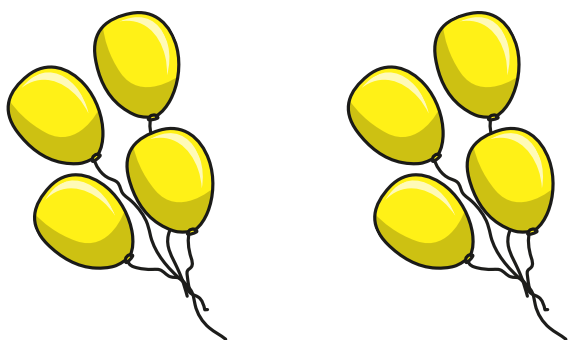There are ☐ pears in each bag.

There are ☐ pears in total.

b)

There are ☐ plates.

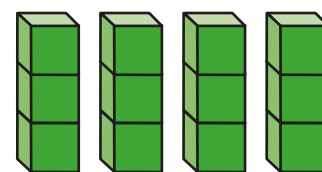There are ☐ doughnuts on each plate.

There are ☐ doughnuts in total.
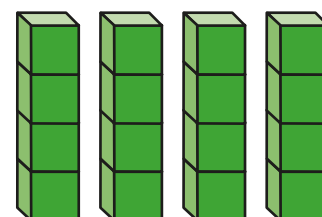
2 Complete the multiplication.

☐ × ☐ = ☐

3 Match the representations to the number sentences.

Complete the number sentences.

$4 \times 2 =$ ☐

$4 \times 3 =$ ☐
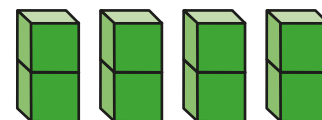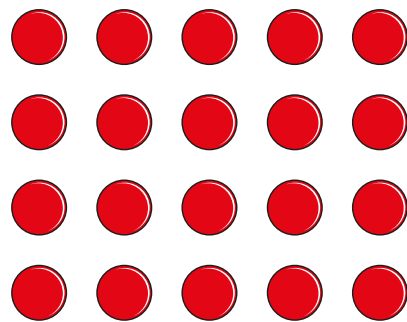
$4 \times 4 =$ ☐

4 Starting from zero, circle the numbers in the 4 times-table. The first one has been done for you.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

5 Esther makes this array.

What multiplication facts does the array represent?

Complete the multiplications.

☐ × ☐ = ☐

☐ × ☐ = ☐

6 Fill in the missing number.

| 4 | 4 | 4 | 4 | 4 | 4 | 4 |
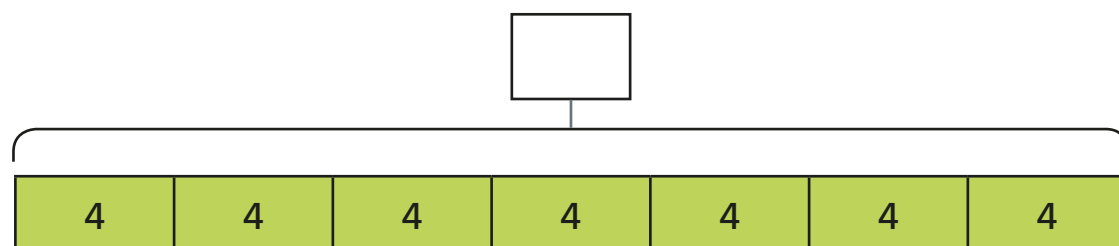
What multiplication is represented?

Complete the multiplication.

☐ × ☐ = ☐

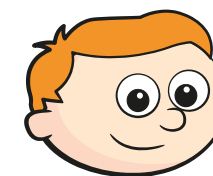**7** Teddy has 4 bags of 10 sweets.

How many sweets does Teddy have?

Teddy has ☐ sweets.

8 A bottle contains 4 litres of juice.

Mrs Wilson needs 30 litres of juice for a party.

She has 12 bottles.

Does she have enough juice?

_____

9

To multiply by 4, you take the number you are multiplying and double it twice.

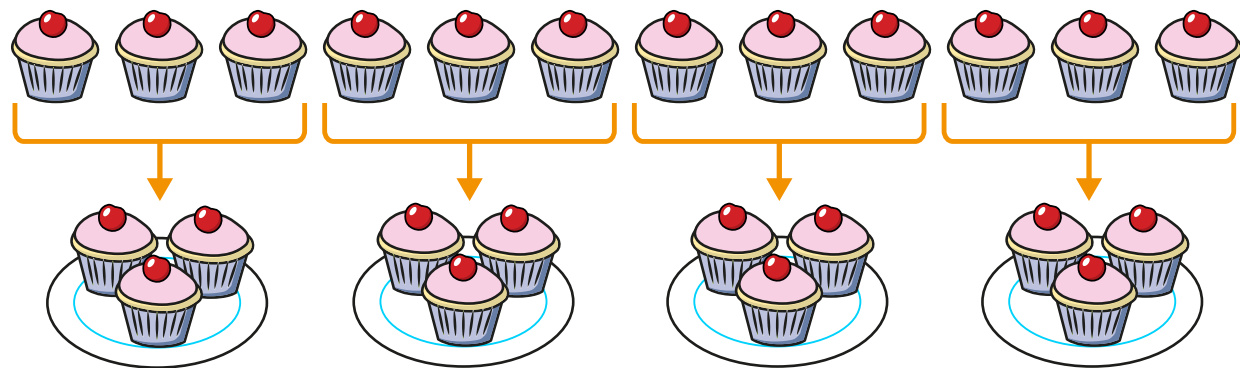Do you agree with Ron? _____

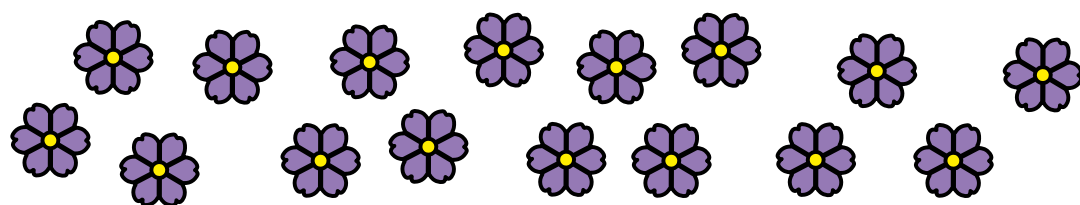Explain your answer.

_____

1 Here are 12 cakes.

Complete the sentences.

There are ▢ plates.

Each plate has ▢ cakes.

12 shared into ▢ equal groups is ▢

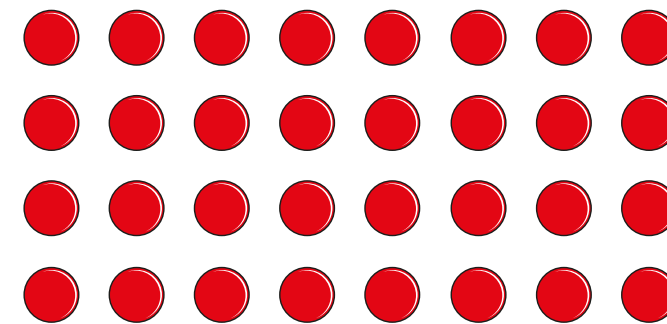**2** Circle groups of 4 flowers.

a) How many groups of 4 flowers did you make? ▢

b) Complete the sentence.

There are ▢ groups of 4 in 16
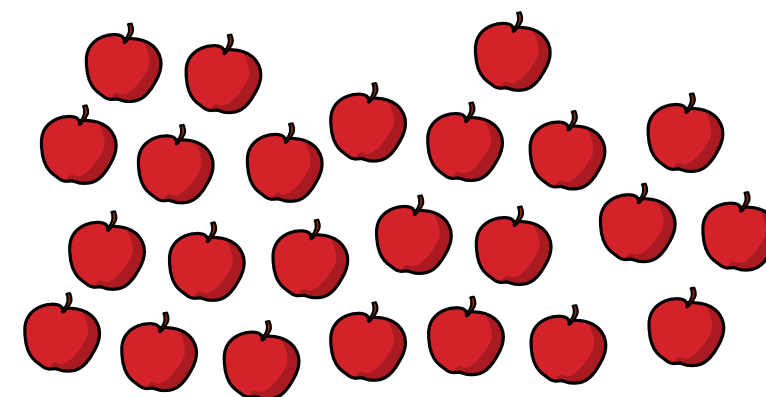
3 Eva makes an array with 32 counters.

a) How many groups of 4 are in the array? ▢

b) Use this to complete the division sentence.

32 ÷ 4 = ▢

4 A farmer has 24 apples.
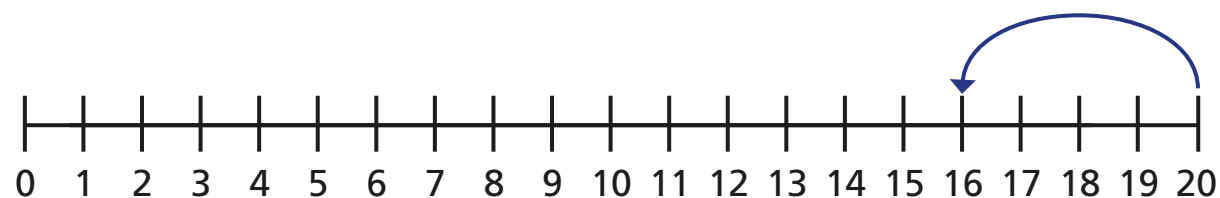
He wants to pack the apples equally into 4 bags.

Apples   Apples   Apples   Apples

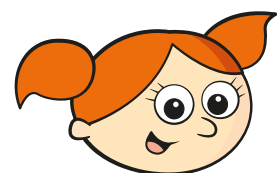How many apples will be in each bag?

▢ ÷ ▢ = ▢

There will be ▢ apples in each bag.

5 There are 20 muffins.

4 muffins fit in 1 box.

Use the number line to work out how many boxes can be filled.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
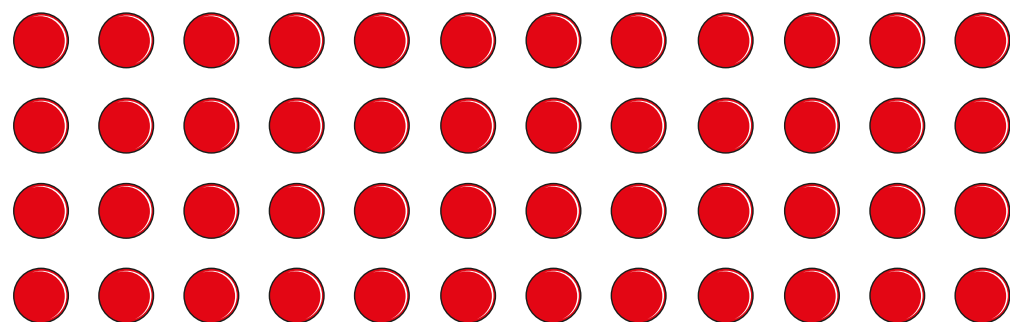
☐ boxes of muffins can be filled.

6 Alex is trying to divide 48 by 4

To multiply by 4, you can double the number and double again.

To divide a number by 4, I think you can halve the number and halve it again.
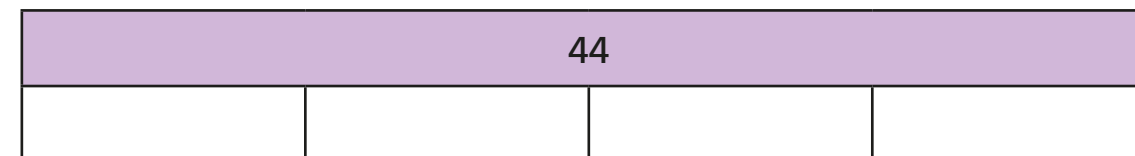
Divide the array to show that Alex's method works.

Does Alex's method always work?

7 Complete the bar model.

44

Complete the division statement to match the bar model.

44 ÷ ☐ = ☐

8 Mo is working out whether numbers divide equally by both 2 and 4

Complete the table and continue the pattern.

The first one has been done for you.

Number	Divided equally by 2 is . . .	Divided equally by 4 is . . .
2	1	does not divide equally
4		
6		
8		
10		
12		

What do you notice?

_____

_____

The 4 times-table

1 Complete the multiplication.

a)

$\boxed{} \times \boxed{} = \boxed{}$

b)

$\boxed{} \times \boxed{} = \boxed{}$
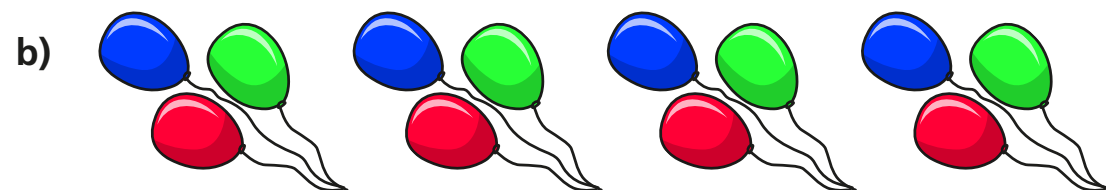
2 Complete the number sentences.

a) $6 \times 4 = \boxed{}$

b) $4 \times 3 = \boxed{}$

c) $\boxed{} = 7 \times 4$

d) $4 \times \boxed{} = 48$

e) $0 \times 4 = \boxed{}$

f) $4 \times 9 = \boxed{}$

g) $24 \div 4 = \boxed{}$

h) $8 \div 4 = \boxed{}$

i) $0 \div 4 = \boxed{}$

j) $\boxed{} \div 11 = 4$

k) $\boxed{} \div 4 = 5$

l) $1 \times 4 = \boxed{}$

3 What multiplication and division statements does the array represent?

Complete the statements.

$\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \div \boxed{} = \boxed{}$

$\boxed{} \div \boxed{} = \boxed{}$
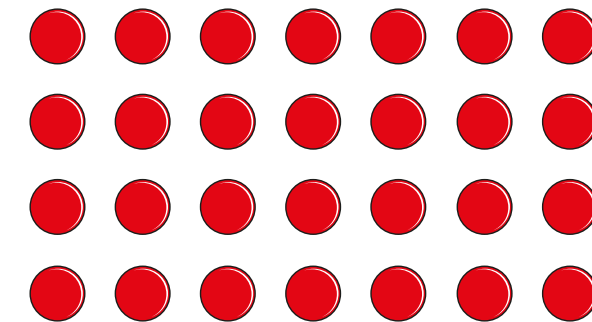
4 Complete the number sentences.

a) $2 \times 4 = \boxed{}$

$4 \times 4 = \boxed{}$

$8 \times 4 = \boxed{}$

b) $8 = 4 \times \boxed{}$

$16 = 4 \times \boxed{}$

$32 = 4 \times \boxed{}$

c) $3 \times 4 = \boxed{}$

$3 \times 8 = \boxed{}$

$3 \times 12 = \boxed{}$

What patterns do you notice?

5 Write <, > or = to compare the statements.

a) 48 ÷ 12 ◯ 4   **d)** 4 ÷ 4 ◯ 4 × 4

b) 36 ◯ 40 ÷ 4   **e)** 1 × 4 ◯ 4 × 1

c) 16 ÷ 4 ◯ 4 × 4   **f)** 4 × 2 ◯ 32 ÷ 4

6 A paper clip is 4 cm long.

4 cm

How long are 6 of these paper clips?

7 Dexter buys 10 mugs and 4 key rings.
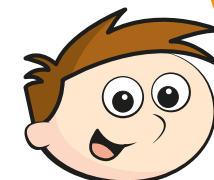
How much money does he spend in total?

£4

£3

8 The pictogram shows the animals a group of children have as pets.

Complete the pictogram.

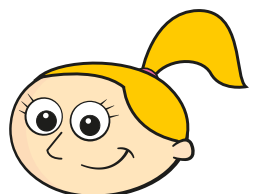| Animal	Pictogram	Number of animals
cat	🔵🔵🔵🔵	
dog		28
bird	🔵🔵🔵🔵🔵	
mouse	🔵	

🔵 = 4 animals

9

Some of the numbers in the 4 times-table are even, but not all of them.

Teddy

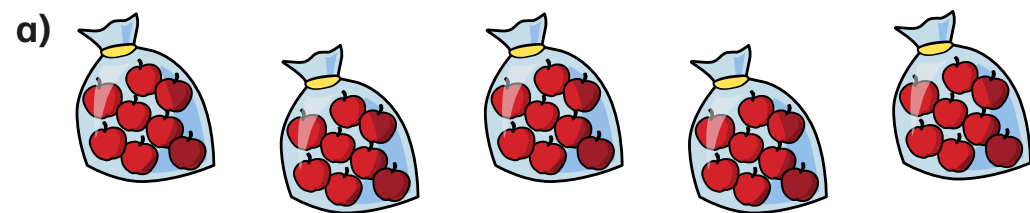All numbers in the 4 times-table are even.

Eva

Who is correct? _____

How do you know? Talk about it with a partner.
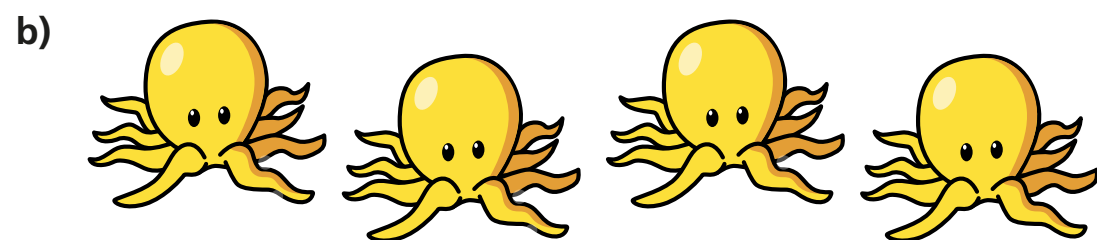
Multiply by 8

1 Complete the sentences.

a)

There are ☐ bags of apples.

There are ☐ apples in each bag.

There are ☐ apples in total.

b)

There are ☐ octopuses.

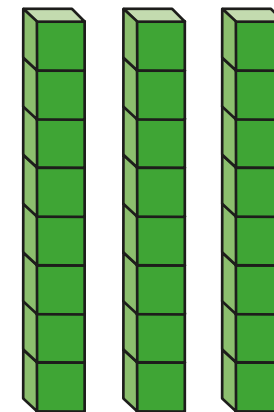There are ☐ arms on each octopus.

There are ☐ arms in total.

2 Use counters to represent 2 × 8

Draw your representation.

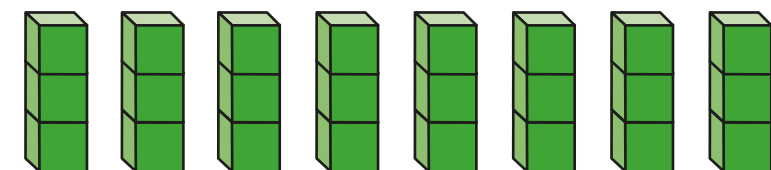**3** Work out how many cubes there are in total.

Complete the multiplication sentences.

a)

☐ × ☐ = ☐

b)

☐ × ☐ = ☐

What is the same about your answers? What is different?

4 How many dots are there in total?

$\boxed{} \times \boxed{} = \boxed{}$
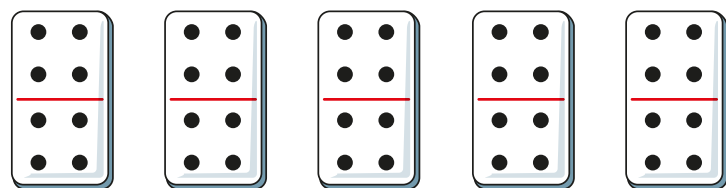
How many different ways can you work this out?

_____

_____

5

8	8	8	8	8	8	8
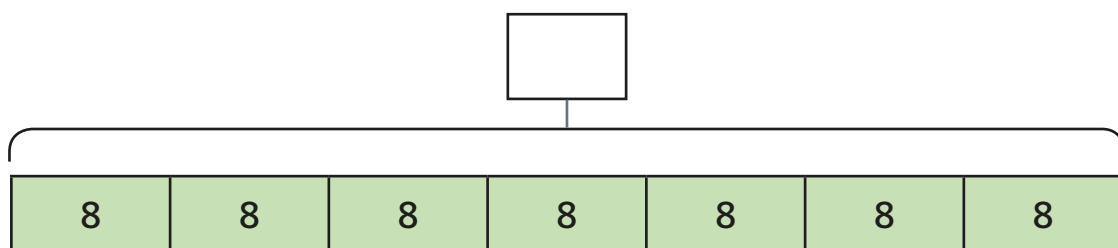
a) What multiplication is represented by the bar model?

$\boxed{} \times \boxed{}$

b) Label the bar model with the whole.

c) Draw a bar model to represent 3 × 8

6 Whitney has 10 packets of seeds.
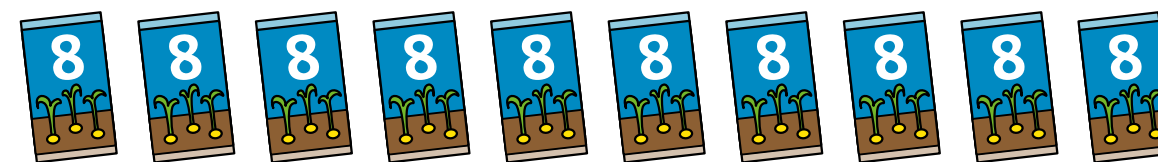
a) How many seeds does Whitney have in total?

$\boxed{}$

b) Ron has 4 fewer packets than Whitney.
How many seeds does he have?

$\boxed{}$

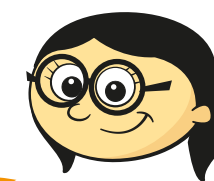**7** Jack and Annie are practising their 8 times-table.
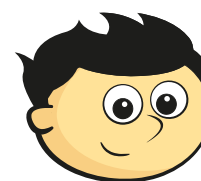
Jack: To multiply any number by 8, you can multiply it by 4 and then double it.

Annie: To multiply any number by 8, you can double the number 3 times.

a) Who do you agree with? _____
Talk about it with a partner.

b) Use both methods to work out these multiplications.

8 × 4 = $\boxed{}$ 8 × 9 = $\boxed{}$ 11 × 8 = $\boxed{}$