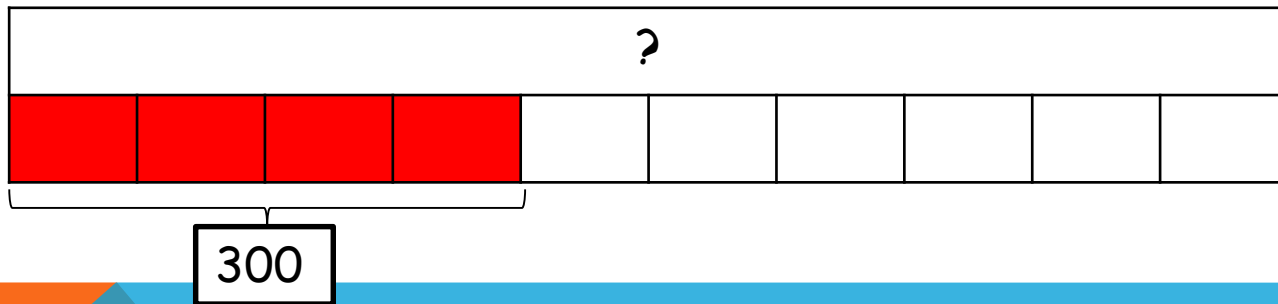
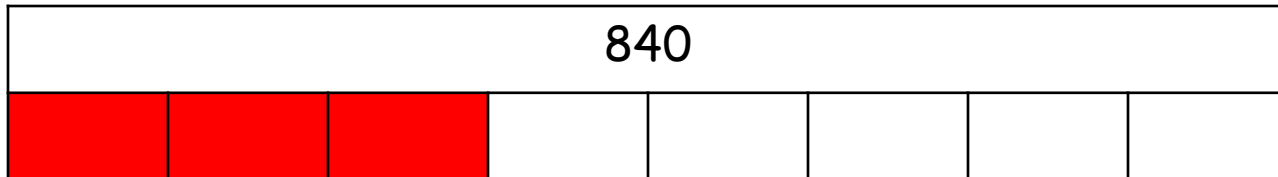


# RECALL

How many different calculations can you write for each of these bar models?

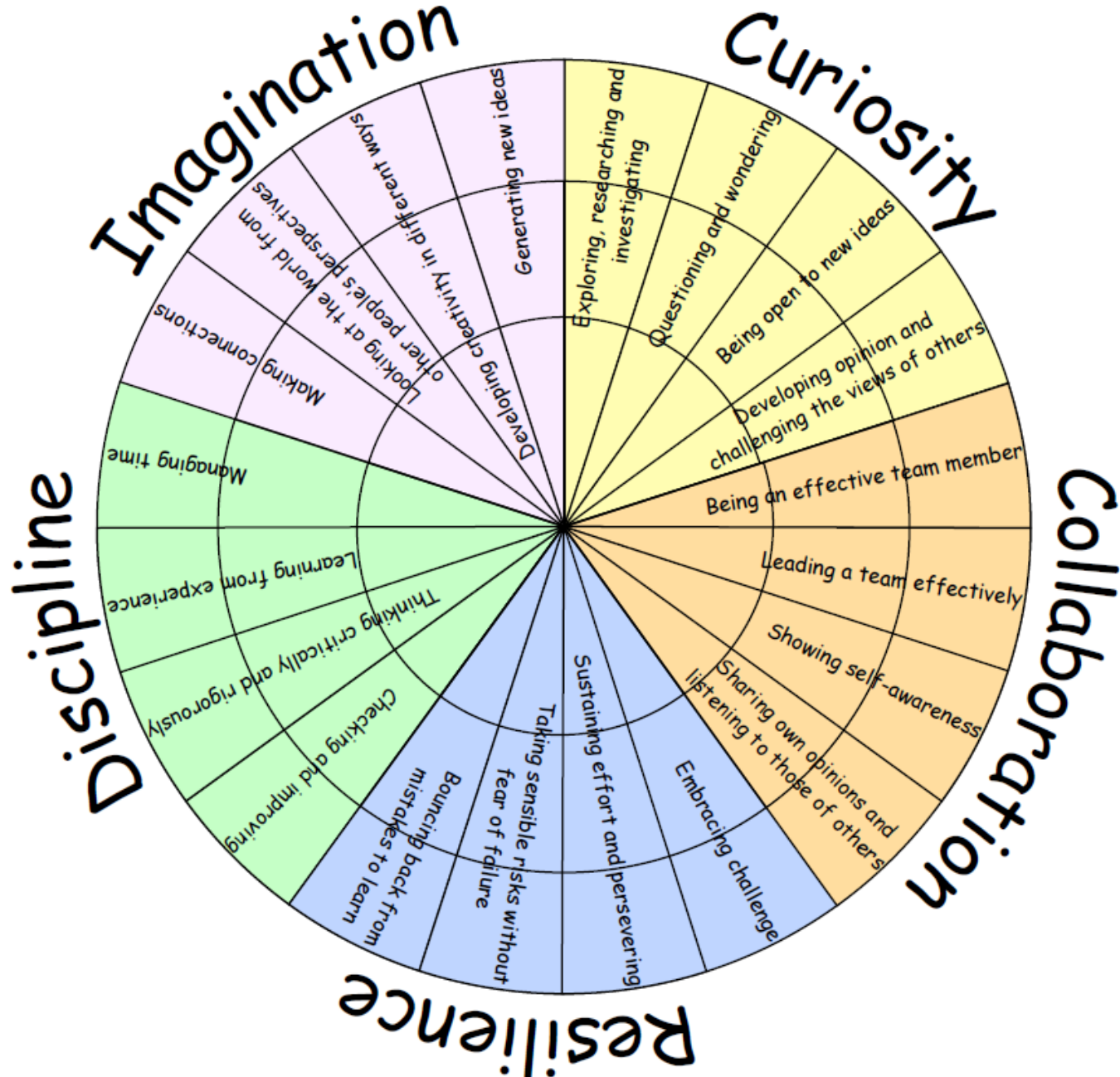


Can you make the calculation into a word problem. Think carefully about the context.

I CAN RECALL AND USE  
EQUIVALENCE BETWEEN  
FRACTIONS, DECIMALS AND %  
TO SOLVE PROBLEMS

Percentage (15ii)

# LEARNING HABITS?



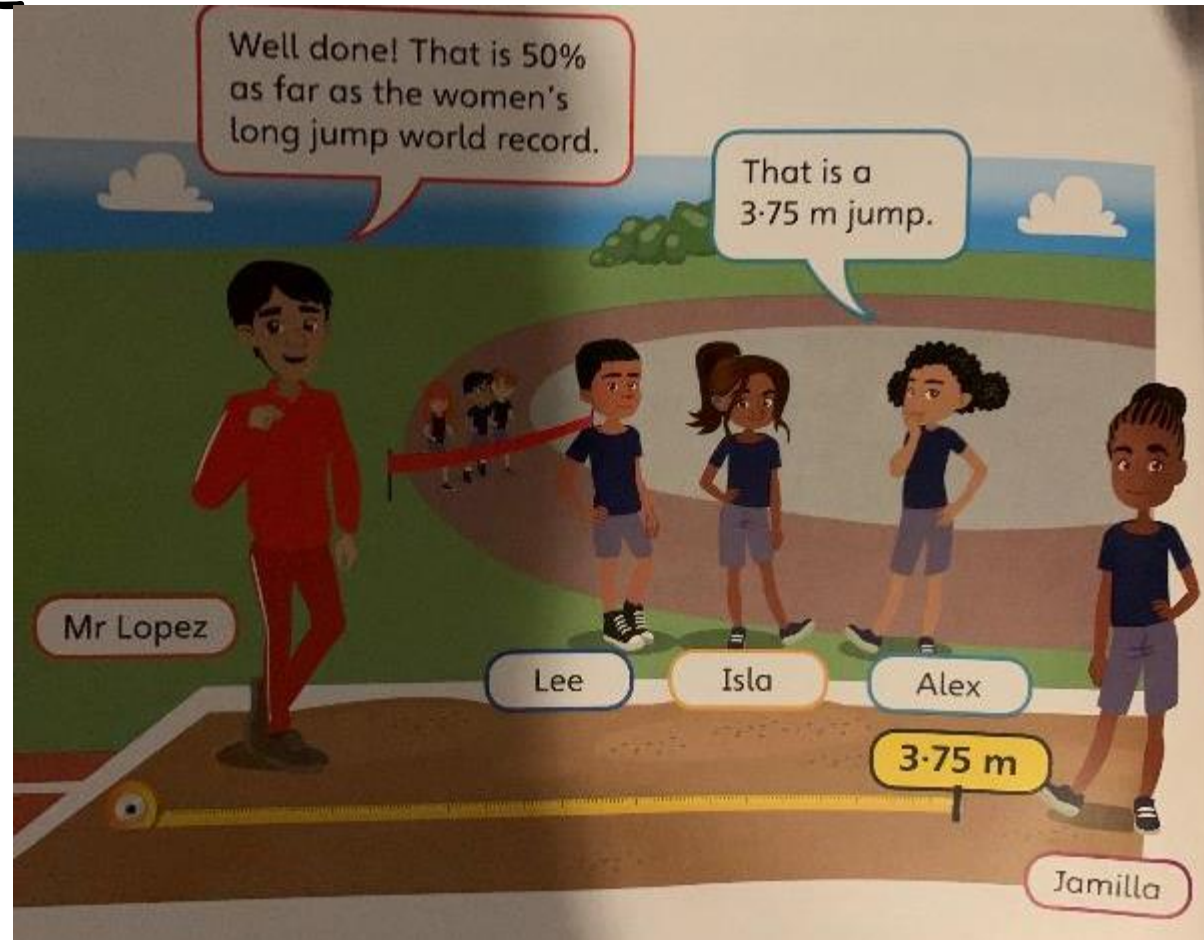
# GUIDED PRACTICE

1) What is the world record for women's long jump?

2) Lee jumps 49cm in the high jump.

This is 20% of the world record for men's high jump.

What is the world record?



1) Mr Hall entered the triple jump. He jumped 13.5m. This is 75% of the current WR. How far is the current WR?

# INTELLIGENT PRACTICE



$$10\% \text{ of } \underline{\hspace{2cm}} = 20$$

$$10\% \text{ of } \underline{\hspace{2cm}} = 40$$

$$10\% \text{ of } \underline{\hspace{2cm}} = 80$$

$$10\% \text{ of } \underline{\hspace{2cm}} = 135$$



$$25\% \text{ of } \underline{\hspace{2cm}} = 30$$

$$25\% \text{ of } \underline{\hspace{2cm}} = 60$$

$$25\% \text{ of } \underline{\hspace{2cm}} = 90$$

$$25\% \text{ of } \underline{\hspace{2cm}} = 160$$



$$20\% \text{ of } \underline{\hspace{2cm}} = 15$$

$$20\% \text{ of } \underline{\hspace{2cm}} = 30$$

$$20\% \text{ of } \underline{\hspace{2cm}} = 45$$

$$20\% \text{ of } \underline{\hspace{2cm}} = 240$$



$$\underline{\hspace{2cm}} \% \text{ of } 400 = 100$$

$$\underline{\hspace{2cm}} \% \text{ of } 300 = 225$$

$$80\% \text{ of } \underline{\hspace{2cm}} = 32$$

$$\underline{\hspace{2cm}} \% \text{ of } 32 = 8$$

# INTELLIGENT PRACTICE ANSWERS



$$10\% \text{ of } 200 = 20$$

$$10\% \text{ of } 400 = 40$$

$$10\% \text{ of } 800 = 80$$

$$10\% \text{ of } 1350 = 135$$



$$25\% \text{ of } 120 = 30$$

$$25\% \text{ of } 240 = 60$$

$$25\% \text{ of } 360 = 90$$

$$25\% \text{ of } 640 = 160$$



$$20\% \text{ of } 75 = 15$$

$$20\% \text{ of } 150 = 30$$

$$20\% \text{ of } 245 = 45$$

$$20\% \text{ of } 1200 = 240$$



$$25\% \text{ of } 400 = 100$$

$$75\% \text{ of } 300 = 225$$

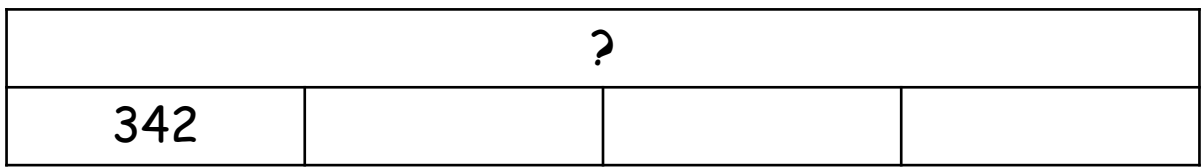
$$80\% \text{ of } 40 = 32$$

$$25\% \text{ of } 32 = 8$$

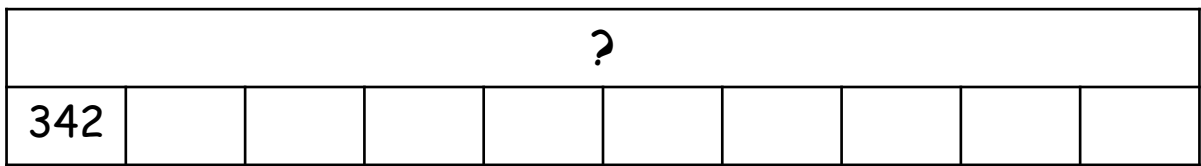
# DIVE DEEPER 1

1) Complete the bar models to find the missing numbers.

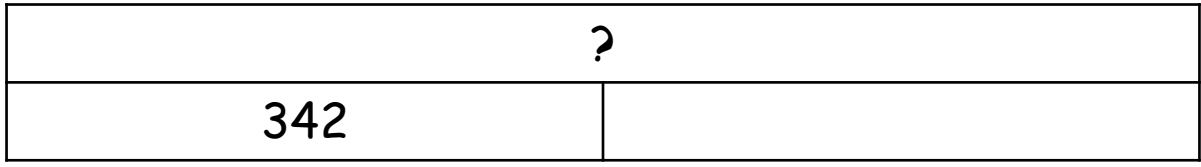
a) 25% of \_\_\_\_ = 342



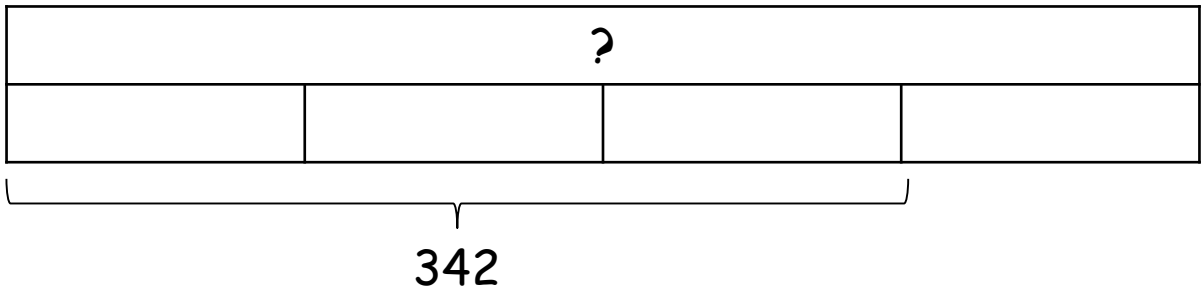
a) 10% of \_\_\_\_ = 342



b) 50% of \_\_\_\_ = 342



c) 75% of \_\_\_\_ = 342



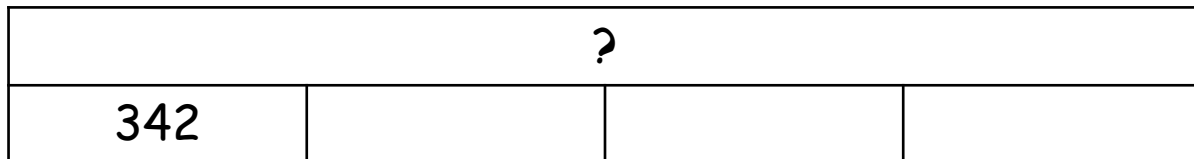
2) 40% of the children in a school are boys.  
There are 188 boys in total.

- a) How many children are there altogether?
- b) How many girls?

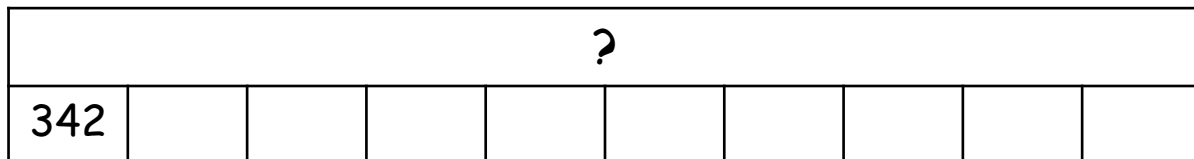
# DIVE DEEPER 1 ANSWERS

1) Complete the bar models to find the missing numbers.

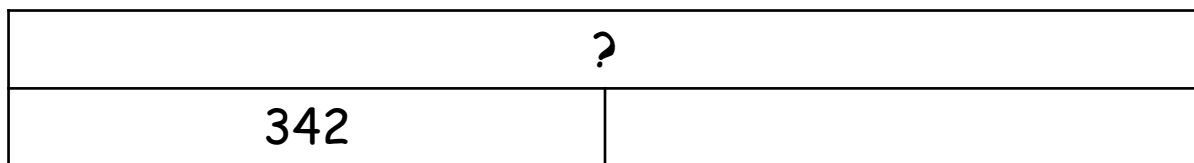
a) 25% of **1368** = 342



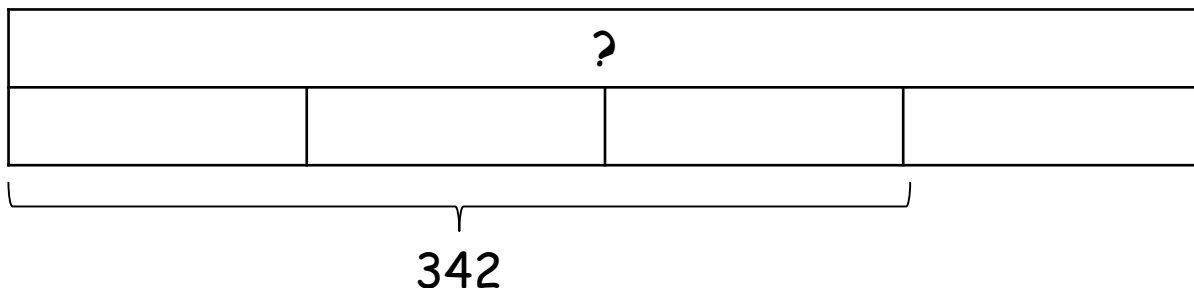
a) 10% of **3420** = 342



b) 50% of **684** = 342



c) 75% of **456** = 342



2) 40% of the children in a school are boys.

There are 188 boys in total.

a) How many children are there altogether? **470**

b) How many girls? **282**



# DIVE DEEPER 2

3) 10% of \_\_\_\_ = 200

a) What mistake has Eva made?

b) Draw a bar model to help Eva find the correct answer.

c) What is the correct answer?



I know that to find 10%  
I have to divide by 10, so  
the answer is 20

4) The table shows the number of people who visited a cinema over four days.

a) Fill in the missing information

b) How many more people went to the cinema on Saturday than Sunday?

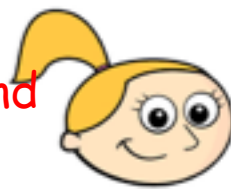
a) 60% of the visitors were children. How many children went to the cinema?

Day	Percentage of total visitors	Number of visitors
Thursday	10%	
Friday		448
Saturday	45%	
Sunday		
Total		2,240

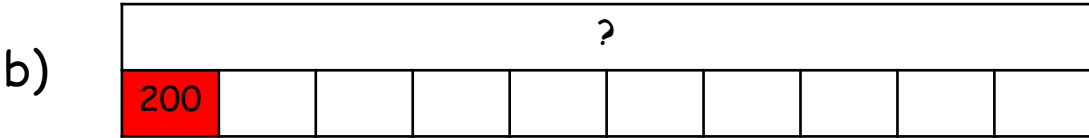
# DIVE DEEPER 2 ANSWERS

3) 10% of \_\_\_\_ = 200

a) What mistake has Eva made? **Eva has found 10% of 200**



I know that to find 10% I have to divide by 10, so the answer is 20



c) What is the correct answer? **2000**

4) The table shows the number of people who visited a cinema over four days.

a) Fill in the missing information



b) How many more people went to the cinema on Saturday than Sunday? **448**



a) 60% of the visitors were children. How many children went to the cinema? **1344**

Day	Percentage of total visitors	Number of visitors
Thursday	10%	224
Friday	20%	448
Saturday	45%	1008
Sunday	25%	560
Total	100%	2,240

# DIVE DEEPER 3

Find three different solutions to make the statement correct.

10% of  =  % of 50

What do you notice about your answers?

15% of the whole rectangle is shaded. What is the perimeter of the whole rectangle?



# SELF-ASSESSMENT

- Some will even be able to write a rule for missing percentages in the question
- Some will be able to find a rule to solve missing number percentage questions
- Most will be able to relate the percentage to the equivalent fraction
- All will be able to draw a bar model to show the problem

