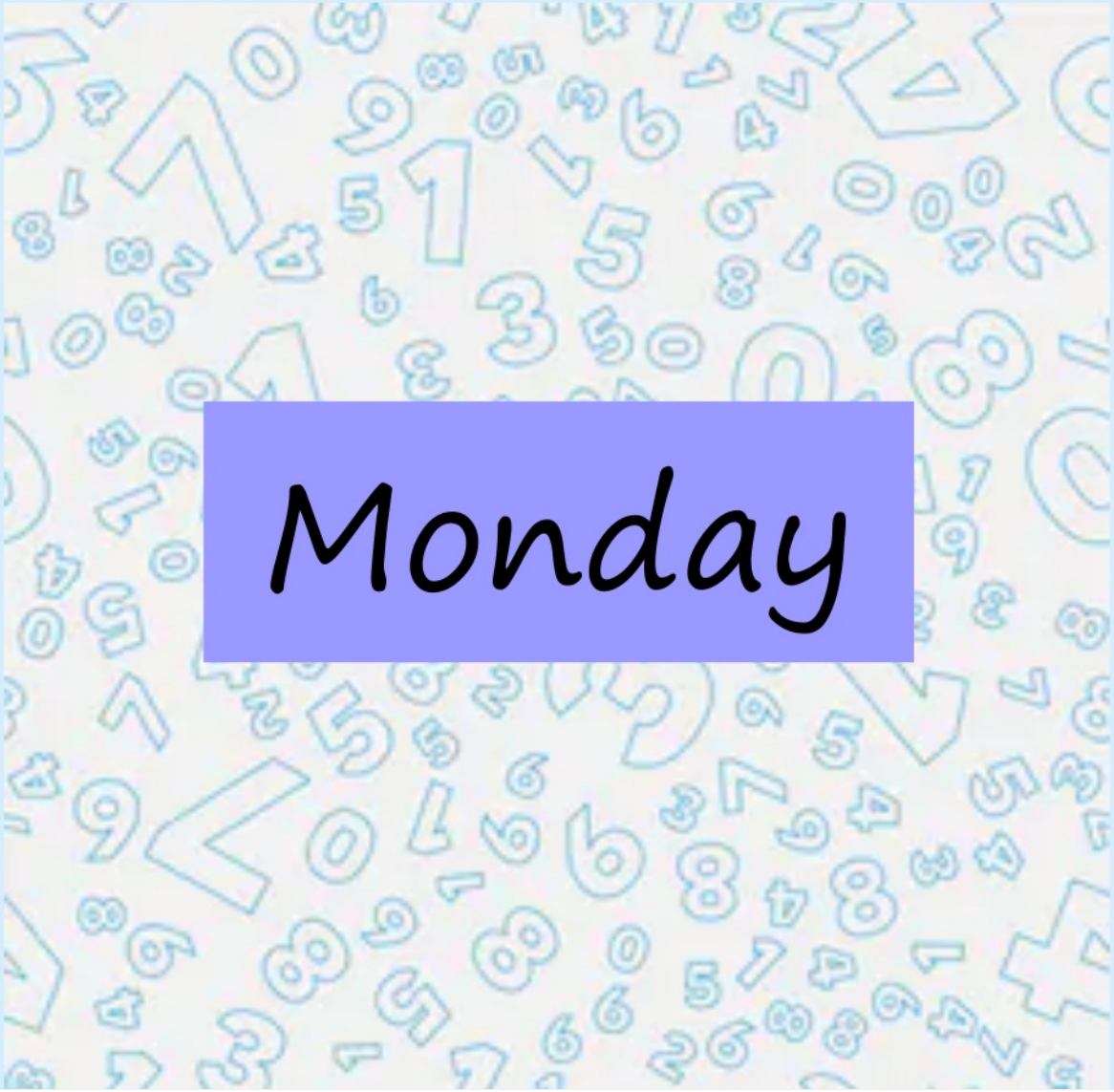
Week 6 of 7

Fractions

Fractions of a set of objects (1)	R
Fractions of a set of objects (2)	R
Calculate fractions of a quantity	
Problem solving – calculate quantities	

Mon - Use Fractions of a set object (R)
Tues- Use Fractions of a set object (R)
Wed- Calculate Fractions of a quanity
Thurs- Problem solve
Fri - EOM


Monday

Monday

IALT: use fractions of set fractions

Equivelent Fractions

1/2 -
4/5 -
7-9-
2/5-

Equivelent Fractions

13/ 5 -
12/ 3 -
9/3 -
4/3 -

Equivelent Fractions

1 whole 1/2 -

4 wholes 4/5 -

2 wholes 15/ 5 -

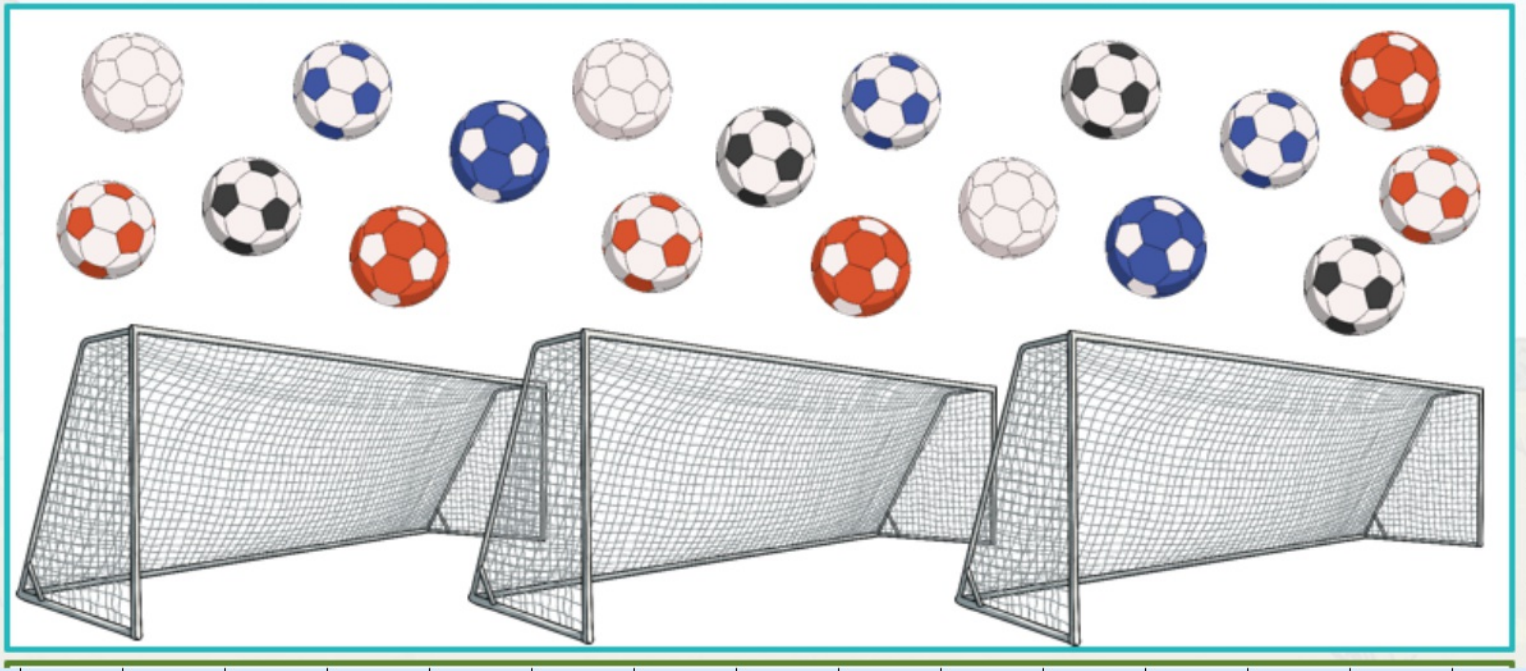
Challenge

True or False?

$\frac{1}{3}$ of the shape is shaded.

https://www.topmarks.co.uk/maths-games/daily10

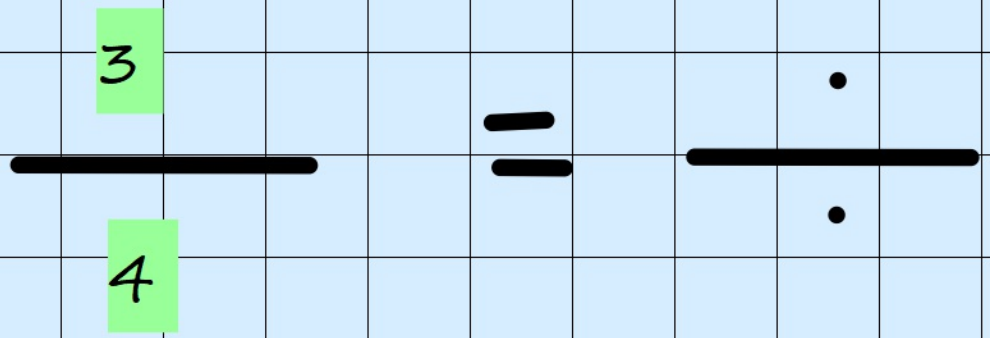
There are 18 footballs. How can we find $\frac{1}{3}$ of 18?



How would we find 1/3 of 18? How could the denominator help us?

There an easy way to do this with fractions.

A fractions looks like a division sign.



There are 18 footballs. How can we find $\frac{1}{3}$ of 18?

18 ÷ 3 = 6

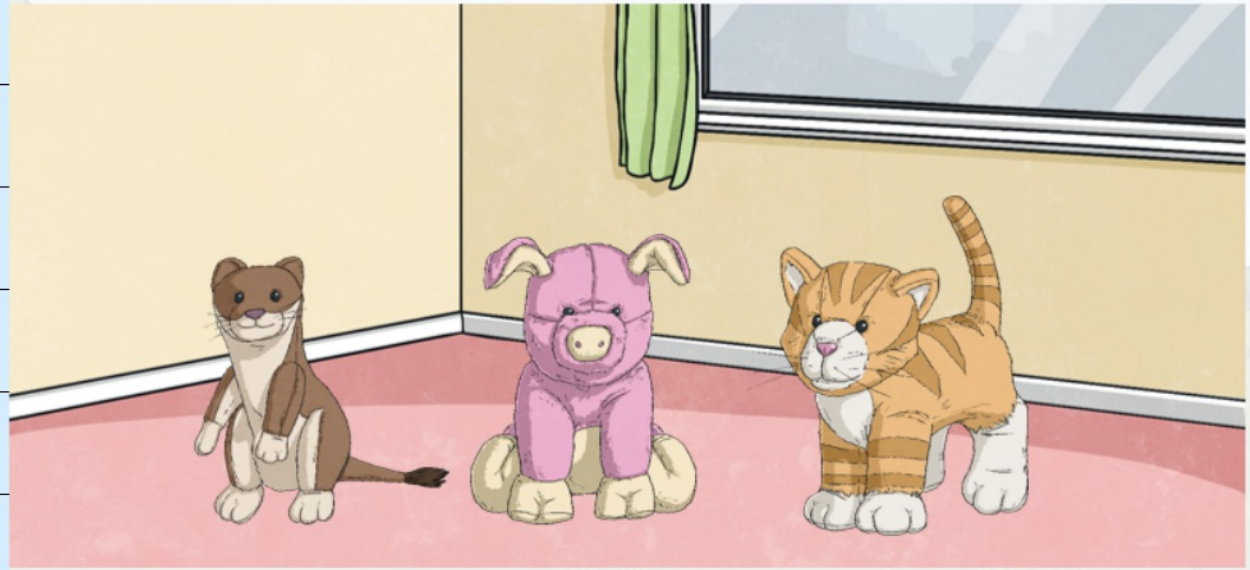
Therefore 1/3 of 18 is 6.

How many footballs will be circled if $\frac{1}{4}$ are selected?
Use a bar model to find the answer.

There are 4 parts and that is why the denominator is 4.

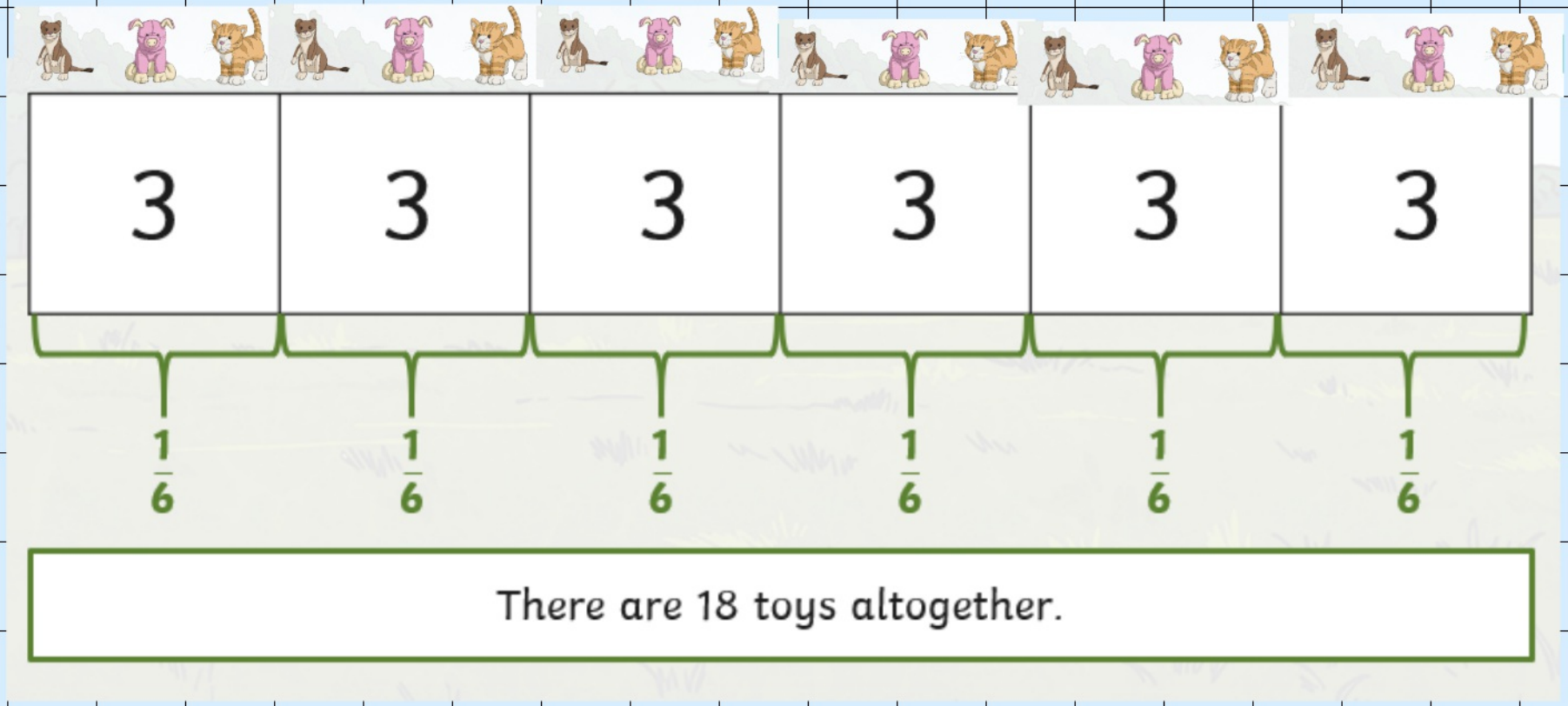
How many footballs would be in each part. Remember it needs to be equal.

Rachel is tidying her toys away. $\frac{1}{6}$ of her toys are still on the floor.

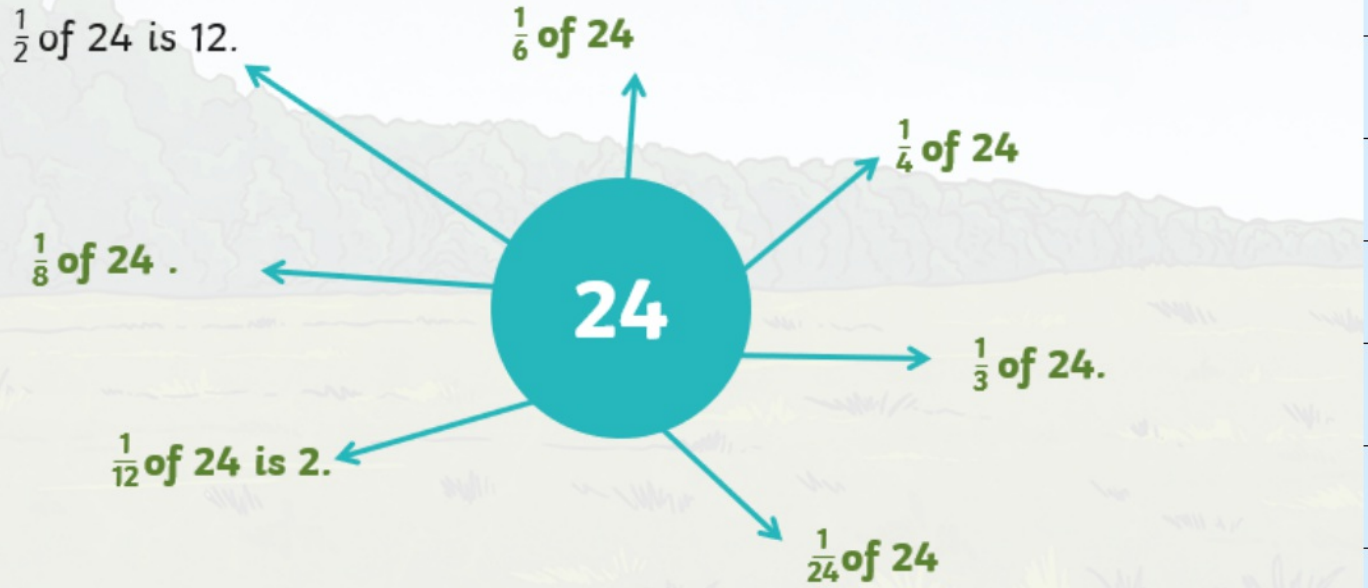


How many toys does Rachel have altogether? Explain your answer.

these 3 toys show 1/6 of all her toys. How many are there altogether?


3
3
3
3
3
3
1/6
1/6
1/6
1/6
1/6
1/6
There are 18 toys altogether.

How many ways can you find a unit fraction of 24?
One has been done for you.



How many ways can you find a unit fraction of 24?
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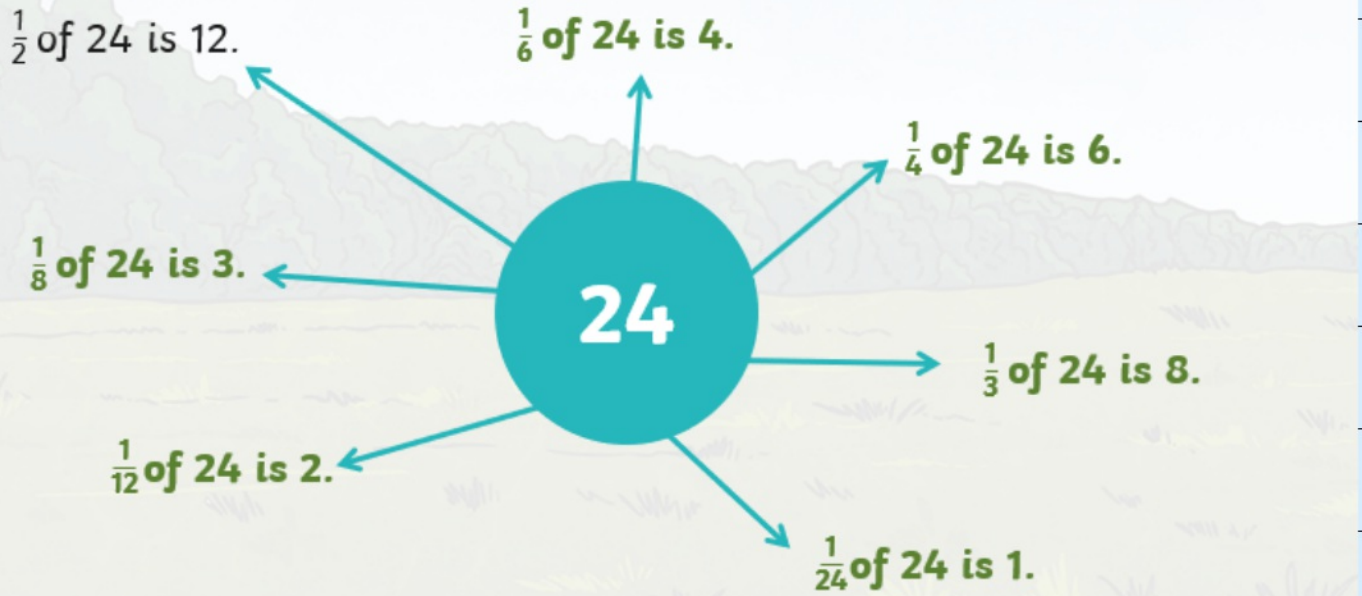


I can add fractions?

HOT HOT HOT

MILD

1/5 of 50

3/6 of 54

2/6 of 72

1/7 of 84

SPICY

Find all the unit fractions for these numbers.

16

15

24

72

90

108

1) Two children discuss who would get the most of 48 sweets available.
Who is right? Use bar models to explain your answer.

If I had $\frac{1}{6}$ of the sweets, I'd have the most.

Becky

If I had $\frac{1}{8}$ of the sweets, I'd have the most.

Ansley

2) Two shops sell the same jumper costing £42.

In Shop A, the jumper is reduced by $\frac{1}{3}$.
In Shop B, the jumper is reduced by $\frac{1}{6}$.

Which shop sells the jumper at the cheaper price?
Explain your answer.

3) The school council have 70 packs of raisins to sell at break time to raise money for a school trip.
To raise the most money, should they aim to sell $\frac{1}{5}$ or $\frac{1}{7}$ of the packs of raisins?
Explain your reasoning.

4) How many ways can you find a unit fraction of 48?
One has been done for you.

$\frac{1}{2}$ of 48 is 24. ← 48

I can add fractions?

HOT HOT HOT

MILD

SPICY

1/5 of 50

10

Find all the unit fractions for these numbers.

3/6 of 54

27

2/6 of 72

24

1/7 of 84

12

16

15

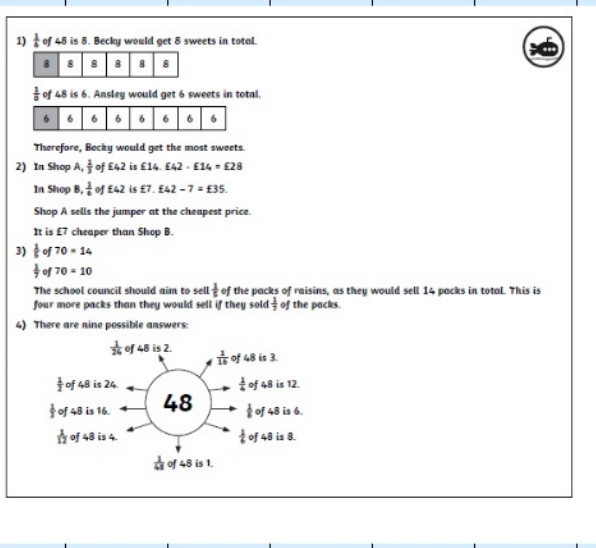
24

72

90

108

Show Teacher



1) $\frac{1}{6}$ of 48 is 8. Becky would get 8 sweets in total.

8 | 8 | 8 | 8 | 8 | 8

$\frac{1}{8}$ of 48 is 6. Ansley would get 6 sweets in total.

6 | 6 | 6 | 6 | 6 | 6 | 6 | 6

Therefore, Becky would get the most sweets.

2) In Shop A, $\frac{1}{5}$ of £42 is £14. £42 - £14 = £28

In Shop B, $\frac{1}{6}$ of £42 is £7. £42 – 7 = £35.

Shop A sells the jumper at the cheapest price.

It is £7 cheaper than Shop B.

3) $\frac{1}{5}$ of 70 = 14

$\frac{1}{7}$ of 70 = 10

The school council should aim to sell $\frac{1}{5}$ of the packs of raisins, as they would sell 14 packs in total. This is four more packs than they would sell if they sold $\frac{1}{7}$ of the packs.

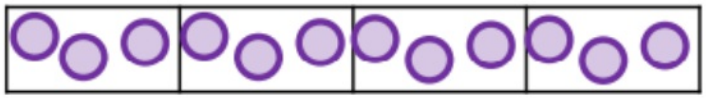
4) There are nine possible answers:

$\frac{1}{2}$ of 48 is 24. $\frac{1}{3}$ of 48 is 16. $\frac{1}{4}$ of 48 is 12. $\frac{1}{6}$ of 48 is 8. $\frac{1}{8}$ of 48 is 6. $\frac{1}{12}$ of 48 is 4. $\frac{1}{16}$ of 48 is 3. $\frac{1}{24}$ of 48 is 2. $\frac{1}{48}$ of 48 is 1.

48

Mild

Dexter has used a bar model and counters to find $\frac{1}{4}$ of 12



Use Dexter's method to calculate:

$\frac{1}{6}$ of 12 $\frac{1}{3}$ of 12 $\frac{1}{3}$ of 18 $\frac{1}{9}$ of 18

Spicy

Fill in the Blanks

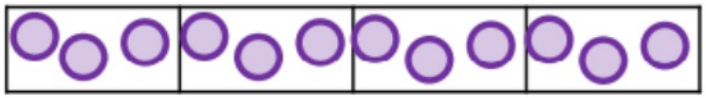
$\frac{1}{3}$ of 60 = $\frac{1}{4}$ of $\square$

$\frac{1}{\square}$ of 50 = $\frac{1}{5}$ of 25

Spicy

Mild

Dexter has used a bar model and counters to find $\frac{1}{4}$ of 12



Use Dexter's method to calculate:

$\frac{1}{6}$ of 12 $\frac{1}{3}$ of 12 $\frac{1}{3}$ of 18 $\frac{1}{9}$ of 18

Show Teacher

Fill in the Blanks

$\frac{1}{3}$ of 60 = $\frac{1}{4}$ of 80

$\frac{1}{10}$ of 50 = $\frac{1}{5}$ of 25