MathsHUBS
Boolean

20 THINGS TO DO WITH DOUBLE-SIDED COUNTERS

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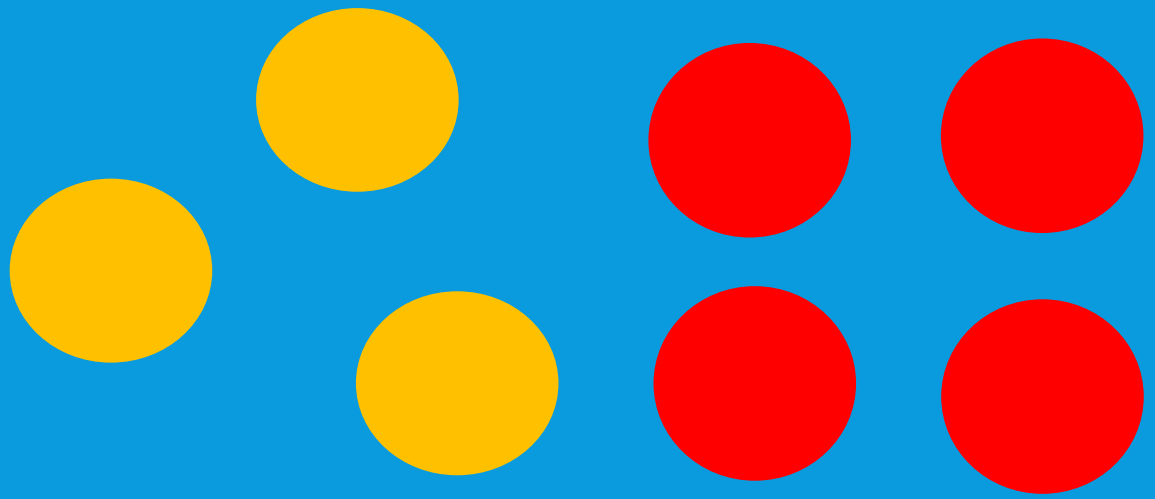
ONE

SUBITISING



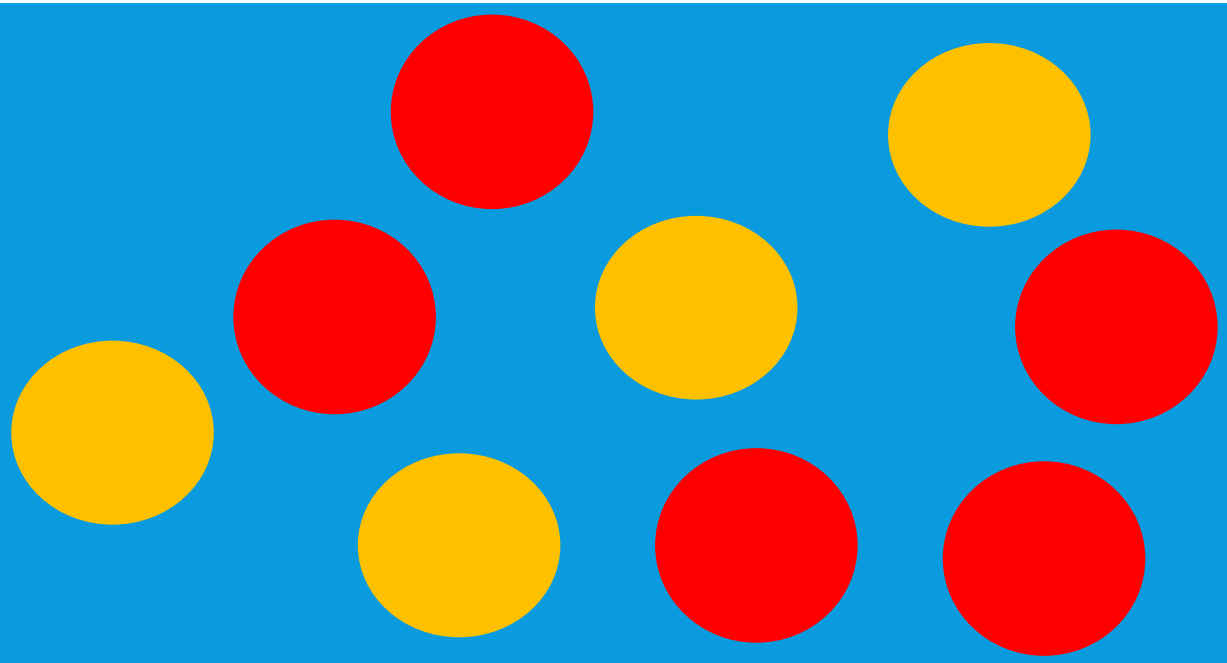
HOW MANY COUNTERS CAN YOU SEE?

TWO PATTERNS

WHAT COMES NEXT?

THREE

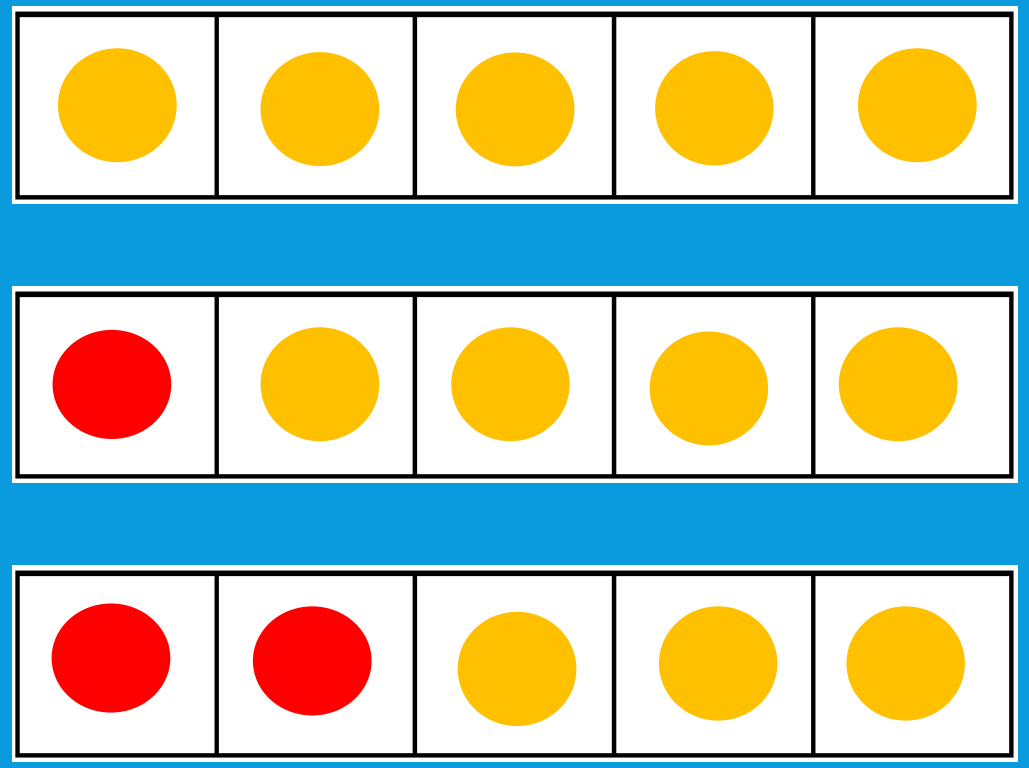
COMPARING



YELLOW < RED

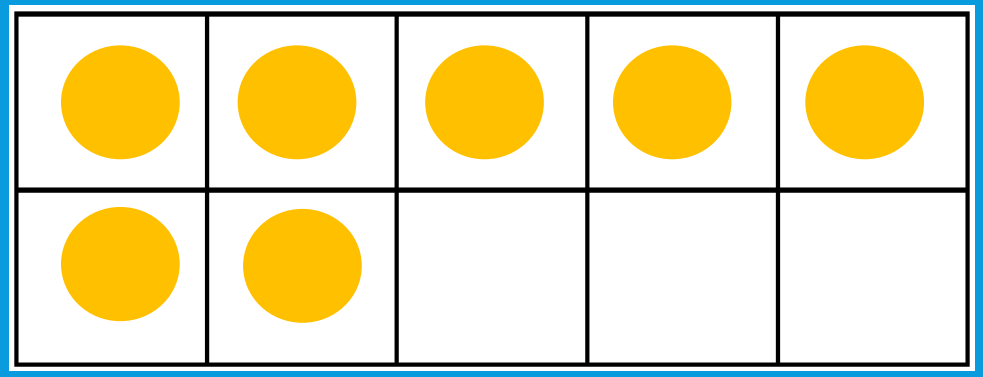
FOUR

COMPOSITION OF NUMBER



FIVE

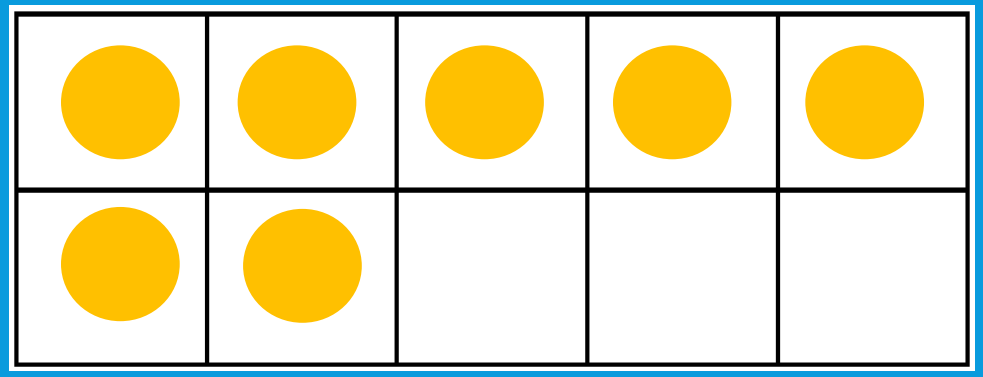
TENS FRAME



I CAN SEE ___ COUNTERS AND ___ EMPTY SPACES

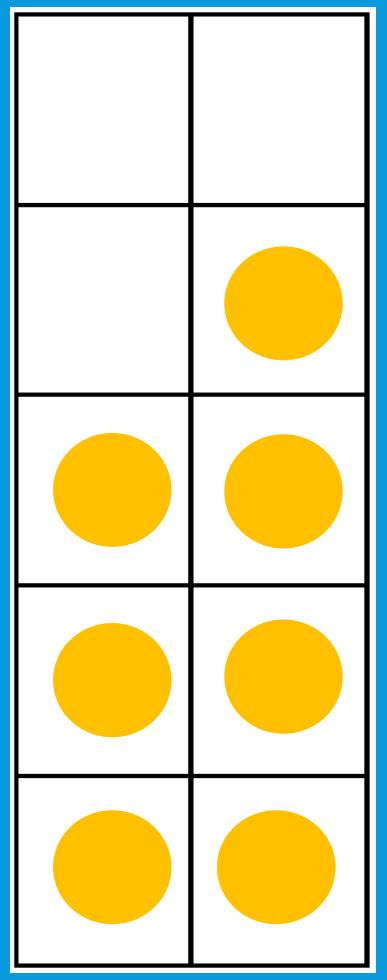
SIX

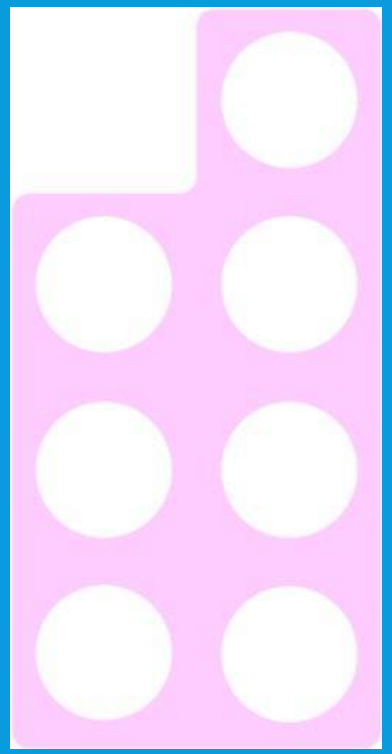
TENS FRAME



FIVES-WISE

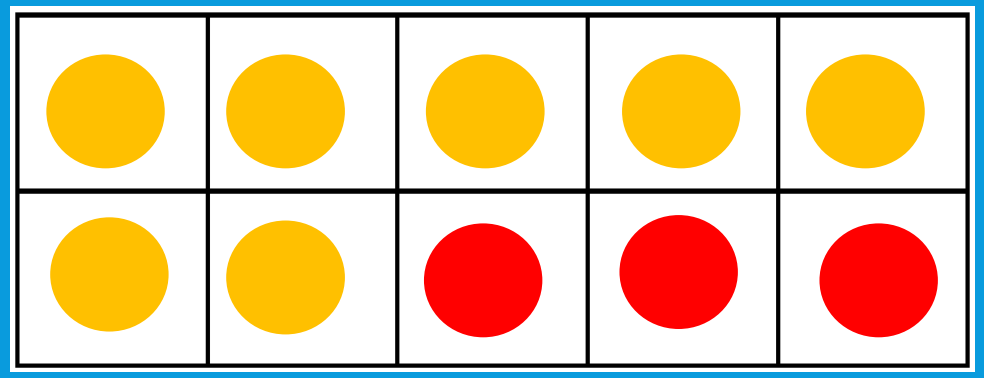
TWOS-WISE

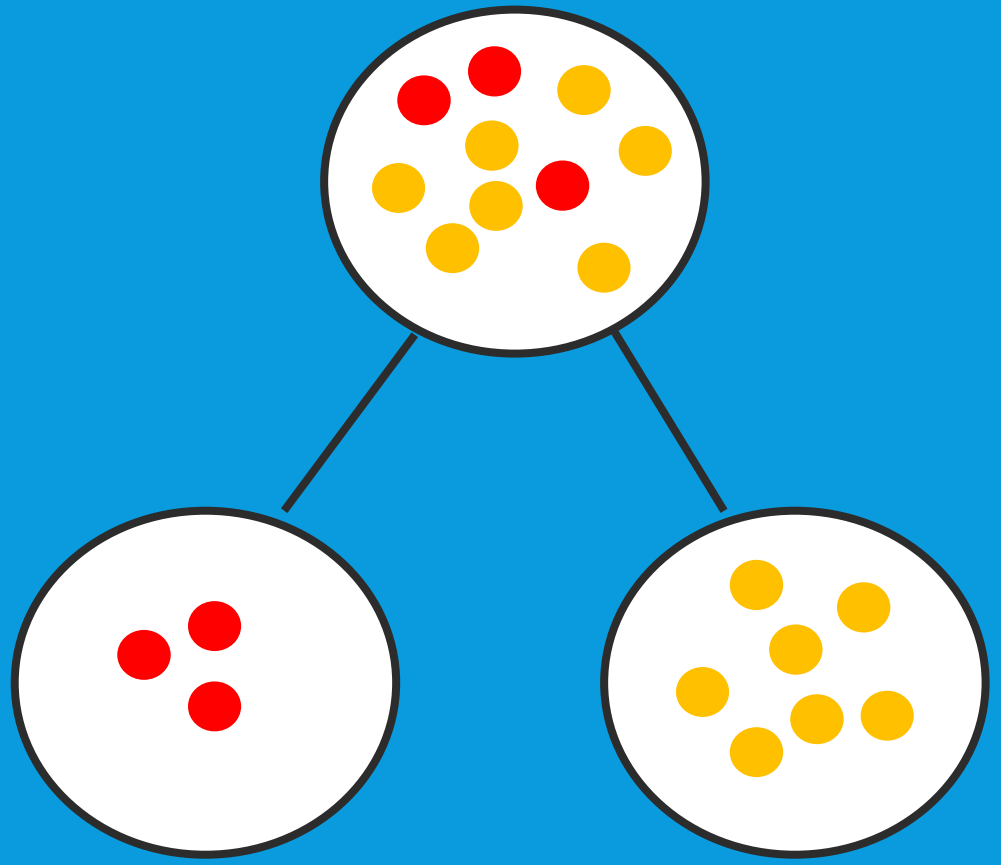




SEVEN

PART-WHOLE RELATIONSHIP



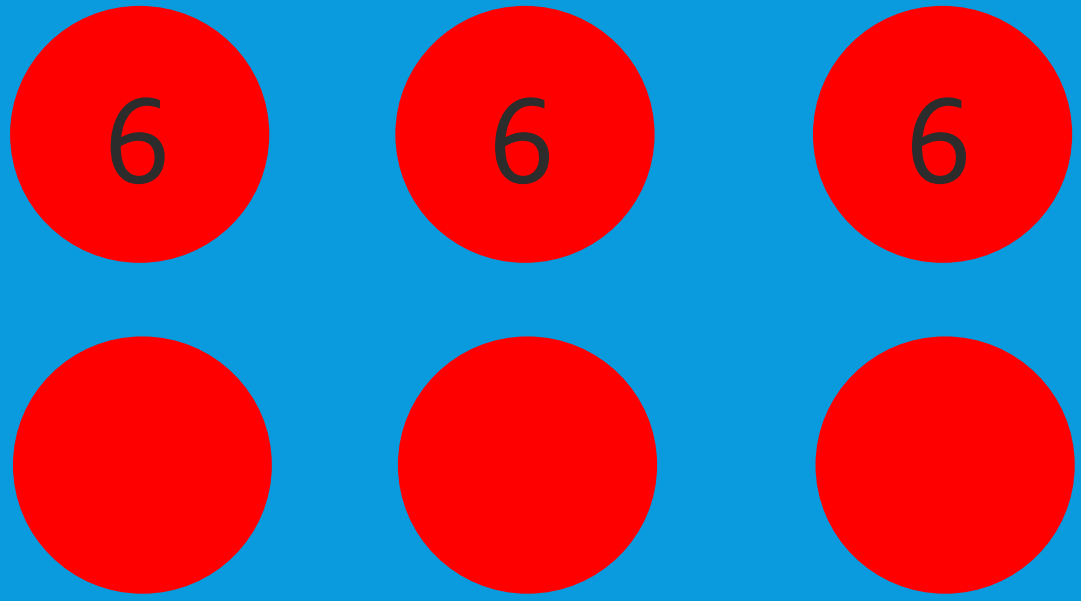


EIGHT

UNITISING

There are 6 eggs in a box. I buy 3 boxes. Altogether I have 18 eggs.

Show me.

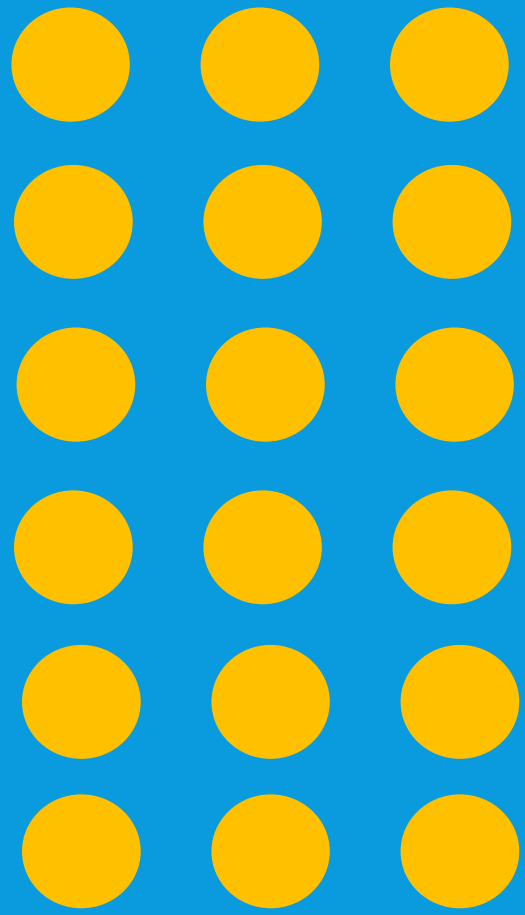


NINE

UNITISING

TEN

ARRAYS



$3 \times 6 = 18$

$6 \times 3 = 18$

$18 = 3 \times 6$

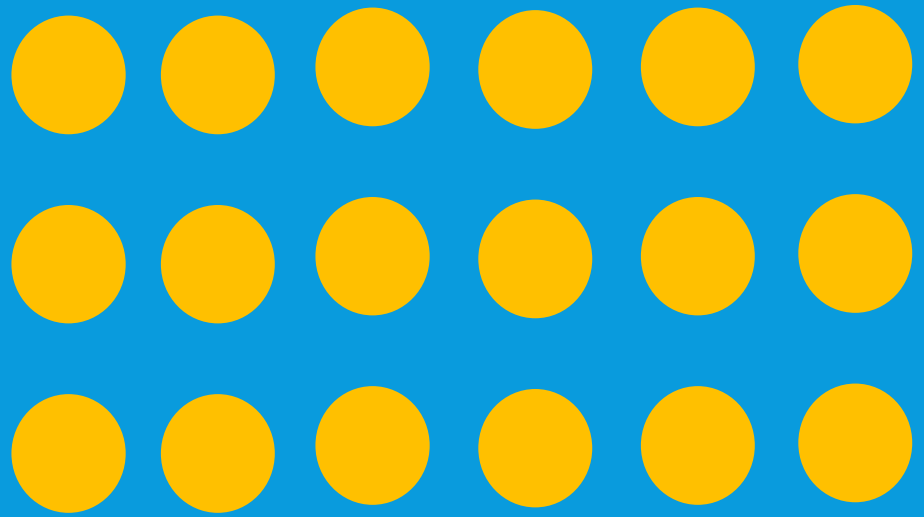
$18 = 6 \times 3$

$18 \div 6 = 3$

$18 \div 3 = 6$

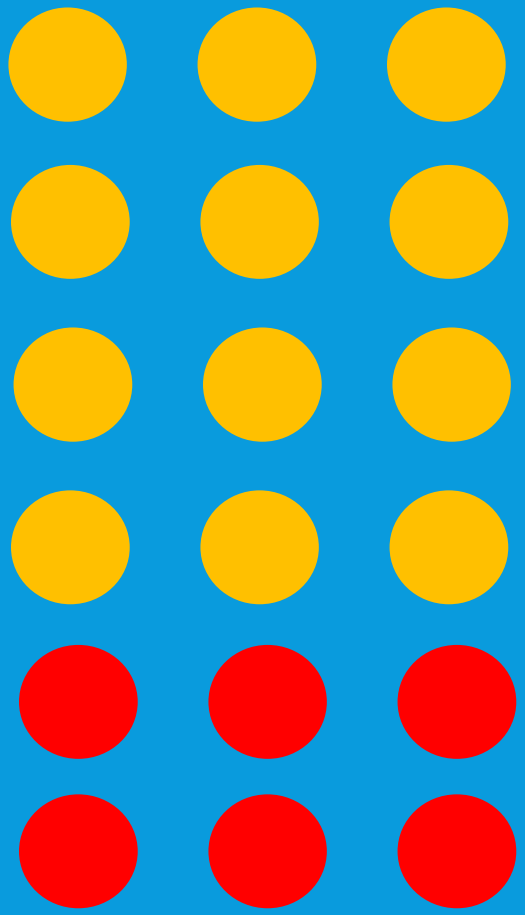
$3 = 18 \div 6$

$6 = 18 \div 3$



ELEVEN

DISTRIBUTIVE LAW



$6 \times 3 = (4 \times 3) + (2 \times 3)$

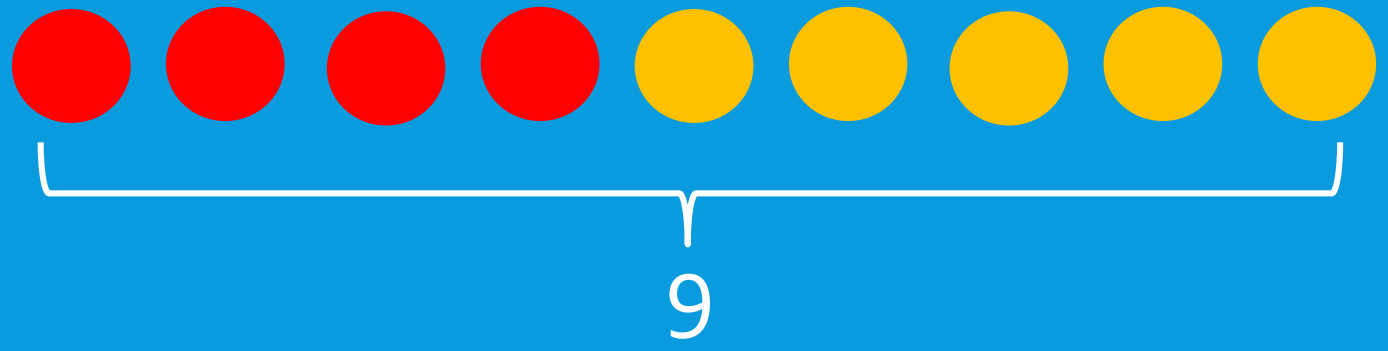
$6 \times 3 = (\_\_\_ \times 3) + (\_\_\_ \times 3)$

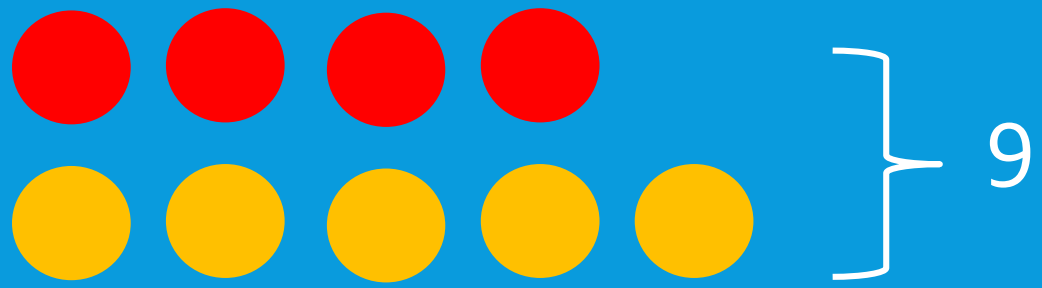
TWELVE

KS1 BAR MODEL

There are 4 bananas and 5 apples in a fruit bowl.

How many piece of fruit are there all together?



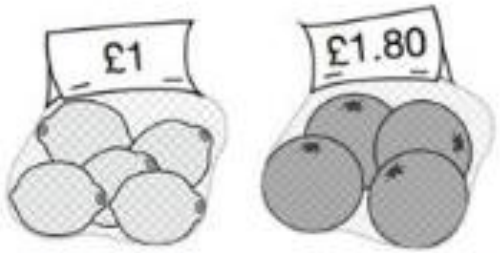


THIRTEEN

KS2 BAR MODEL

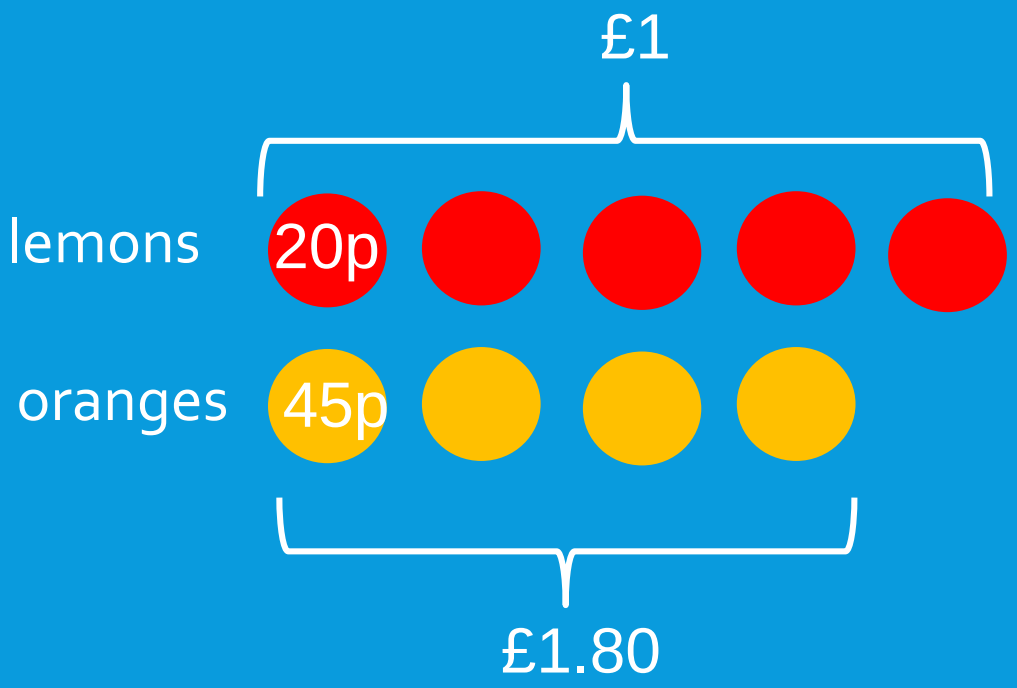
10 A bag of 5 lemons costs £1

A bag of 4 oranges costs £1.80



How much **more** does one orange cost than one lemon?

Show your method

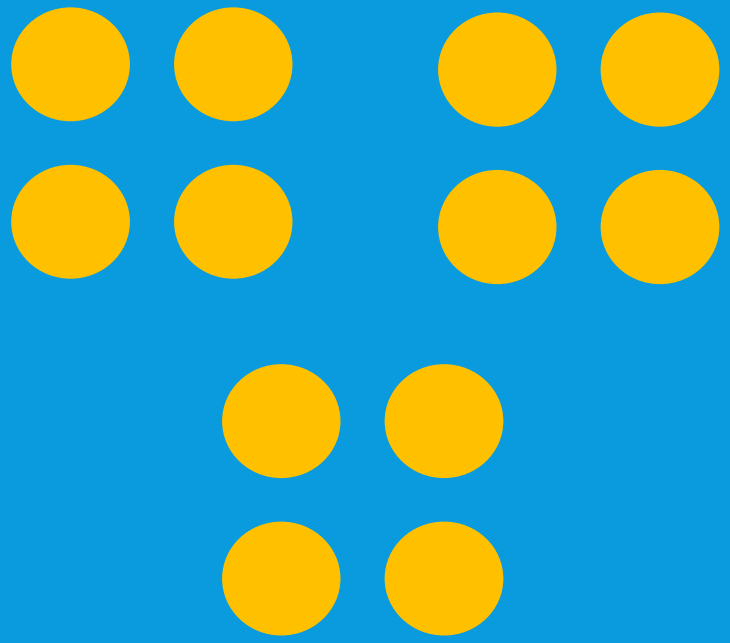


FOURTEEN

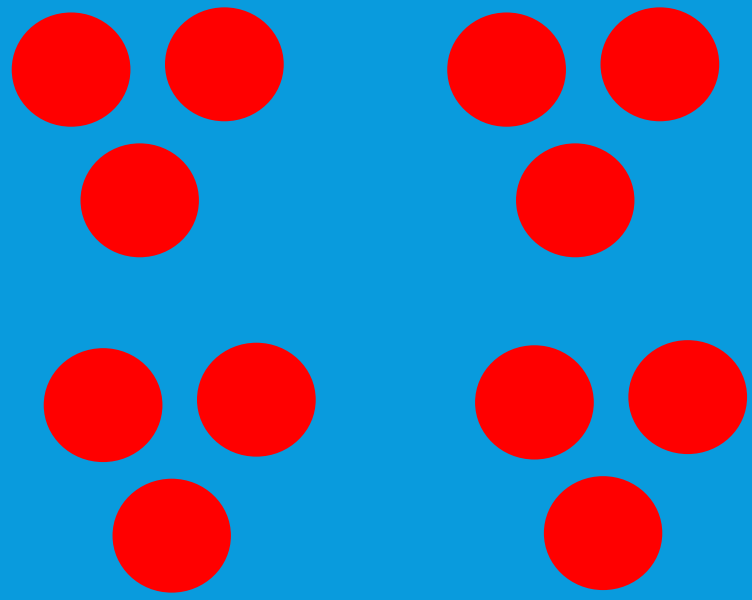
DIVISION

Show me 12 ÷ 3 = 4

Sharing



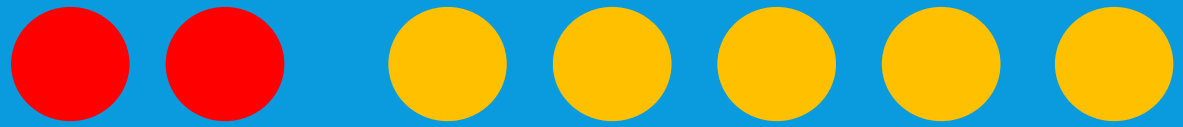
Grouping



FIFTEEN

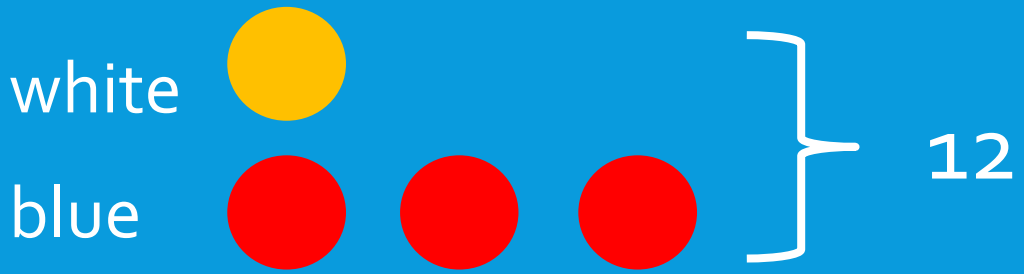
RATIO

What's the ratio of red counters to yellow counters?



2:5

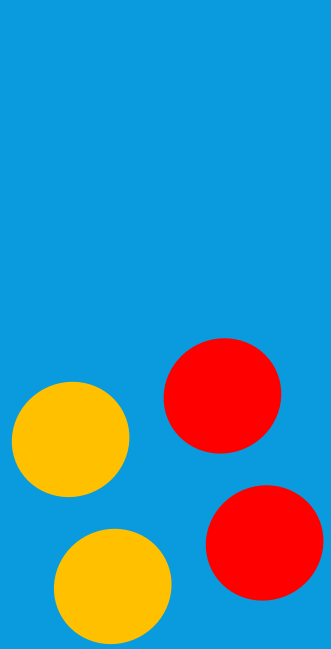
Georgie is decorating her room. She mixes 1 tin of white paint with 3 tins of blue. She needs 12 tins of paint altogether. How many tins of blue paint does she need?

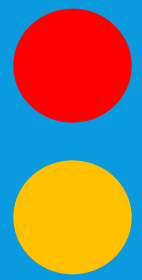


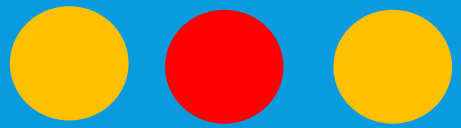
SIXTEEN

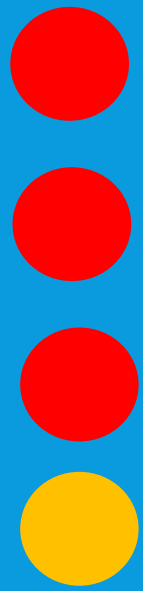
KS1 FRACTIONS

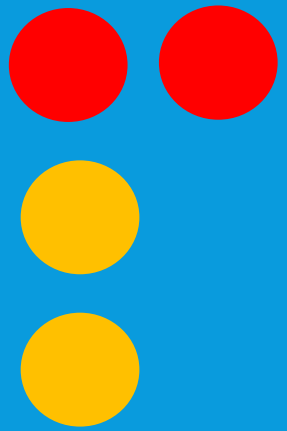
Which of these representations show $\frac{1}{2}$?











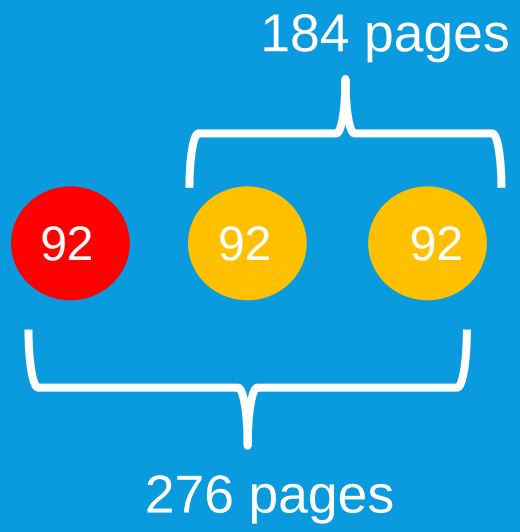
SIXTEEN

KS2 FRACTIONS

A book has 276 pages.

Amina has read $\frac{1}{3}$ of the book.

How many pages are **left** for Amina to read?

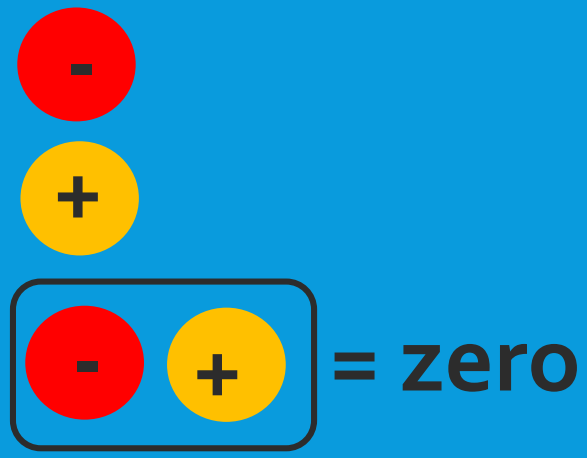


276 ÷ 3 = 92

⅓ of the book = 92 pages

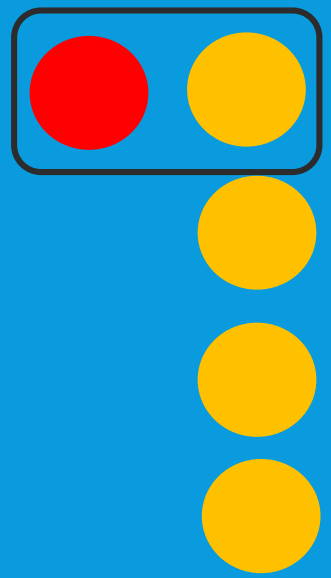
SEVENTEEN

+ NEGATIVE NUMBERS

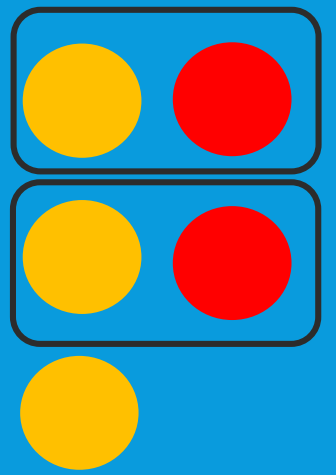


= zero

-1 + 4 = 3



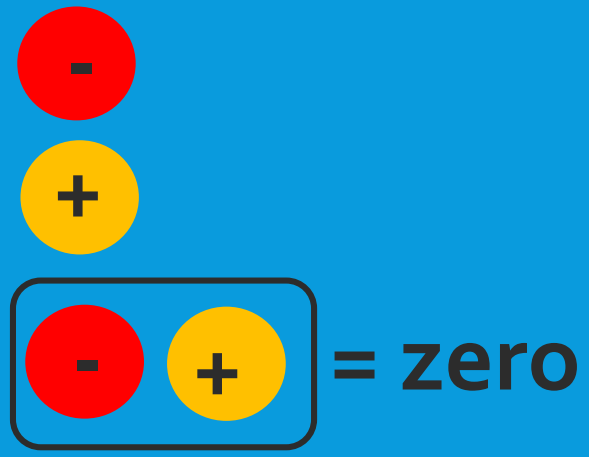
3 + (-2) = 1



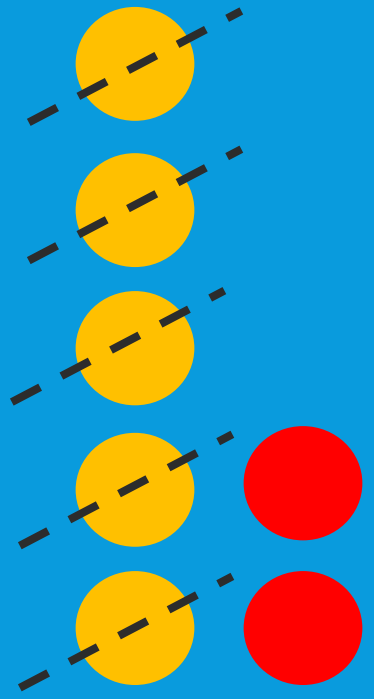
- 7 + 2 = ?

EIGHTEEN

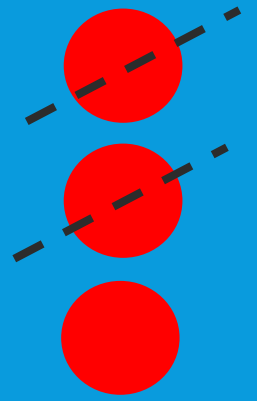
- NEGATIVE NUMBERS



3 – 5 = -2



- 3 – (-2) = -1



- 4 – 2 = ?

NINETEEN

MEAN

Last year, Jacob went to four concerts.

Three of his tickets cost £5 each.

The other ticket cost £7

What was the **mean** cost of the tickets?

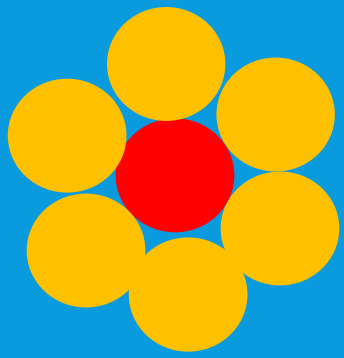
£5 £5 £5 £7

(3 x 5) + 7 = 22
22 ÷ 4 = 4.5

Mean = £4.50

TWENTY INVESTIGATION

Take a counter and surround it by a ring of other counters that MUST touch two others.
How many counters do you need to do this?



Imagine surrounding this ring with more counters.
How many more counters are needed now?
How many counters will there be altogether?

What about a bigger ring? And another? And another?

How would you predict how many counters there will be in any ring?

THANKYOU!

All slides will be available to download after the conference but if you can't wait….or if you have any of your own ideas to share with me ☺

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