

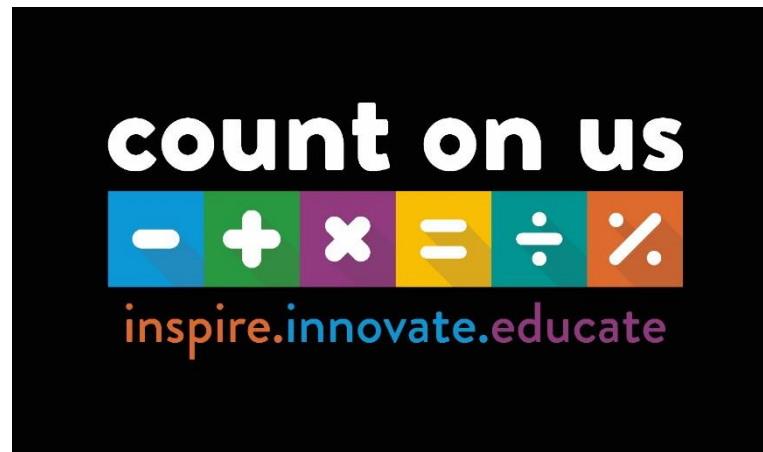
Learning Together Session 7

Tuesday 23rd June 10:00

Algebra

#npfsmaths

Twitter : @CountOnUsEd



Algebra

IT IS NOTHING NEW

Learning Together Session 7

Algebra:

count on us



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Level 1

Understands and use:

- the term 'less than'
- 'greater than',
- 'equal to',
- 'NOT equal to'

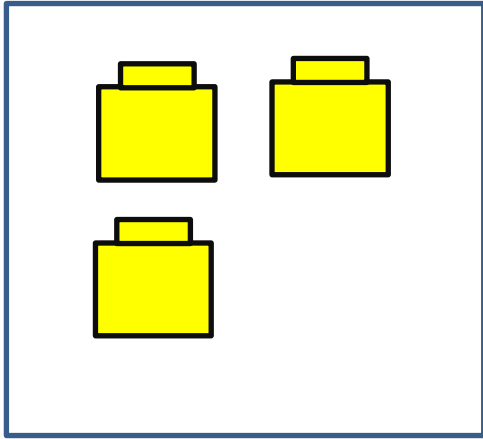
Solve simple algebraic problems where a symbol is used to represent a missing number

Level 2

- Solves simple algebraic equations

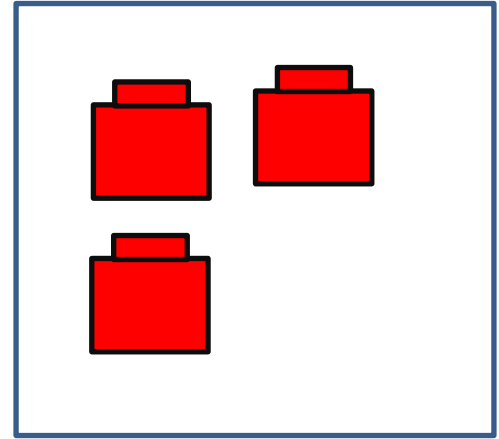
$=$ *equal to*

\neq *NOT equal to*



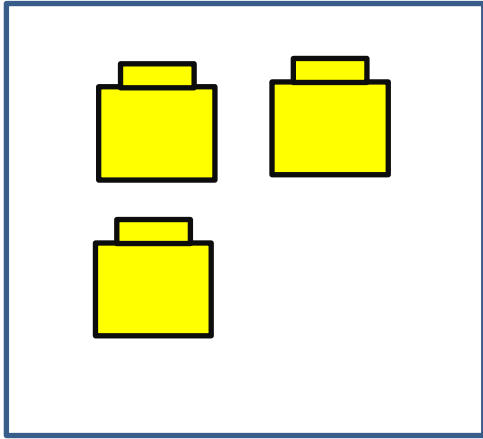
3

=



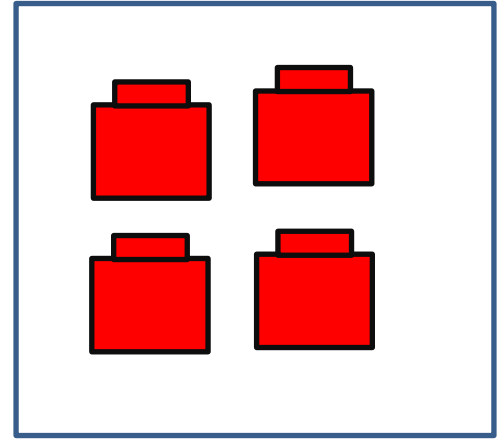
3

=



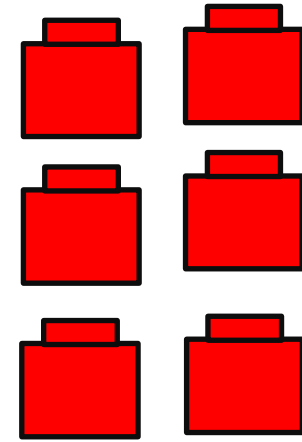
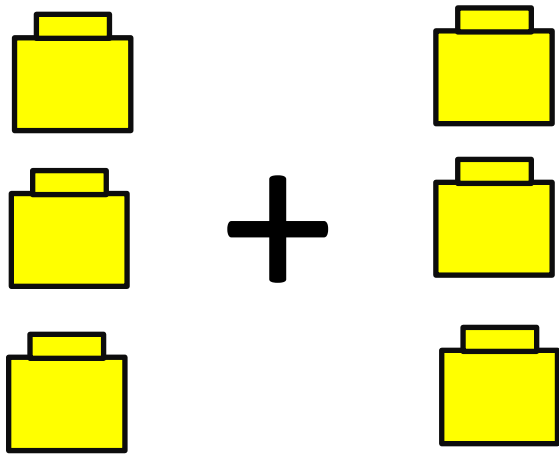
3

\neq



4

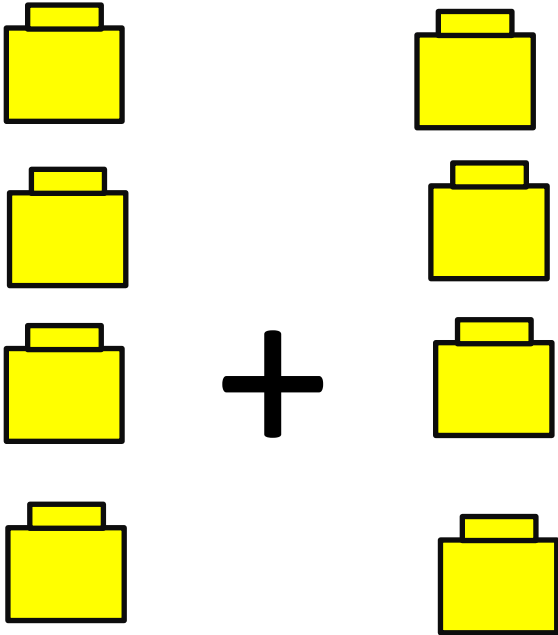
\neq



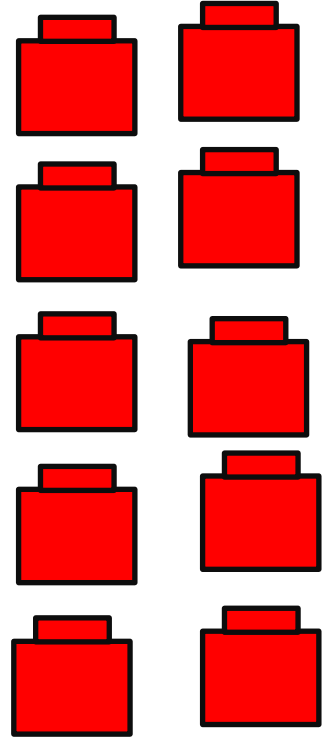
$$3 + 3$$



$$6$$



≠



4 + 4

≠

10

Using only \neq or $=$ sign
Insert the correct
symbol

$$2 + 7 \quad = \quad 3 \times 3$$

Using only \neq or $=$ sign
Insert the correct
symbol

$$4 \times 5 \neq 31 - 12$$

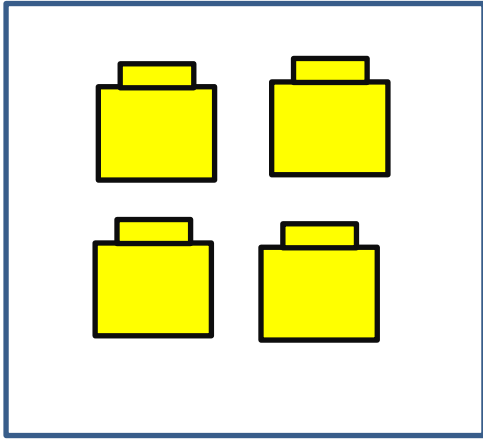
Tasks

www.countonus.org.uk/learning-together

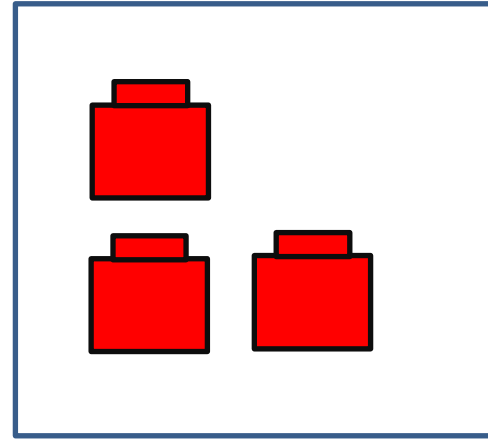
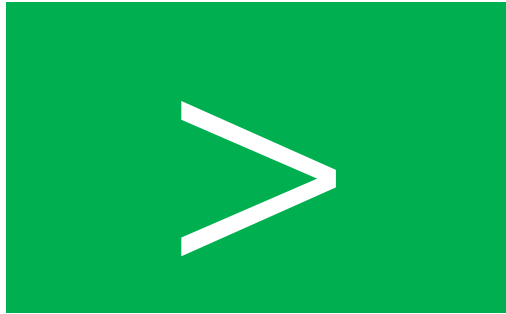
The screenshot shows the Count On Us website interface. At the top is a black navigation bar with the logo 'count on us' and the tagline 'inspire.innovate.educate'. The navigation menu includes: Home, About, Numeracy BluePrints, CLPL & Classroom Visits, Resources (with a dropdown arrow), Online Store, and Contact. Below the navigation bar is a grid of three session cards for 'Session 7' on '23rd June 10am - 10.45am', all focused on 'Algebra'. Each card has a button at the bottom: 'Slides' on the left, 'Tasks' in the middle, and 'YouTube' on the right. A large blue arrow points upwards from the bottom center of the page towards the 'Tasks' button on the middle card. The page is decorated with various colorful geometric shapes like squares, triangles, and circles, some containing mathematical symbols like a plus sign, a minus sign, and a percent sign.

< *less than*

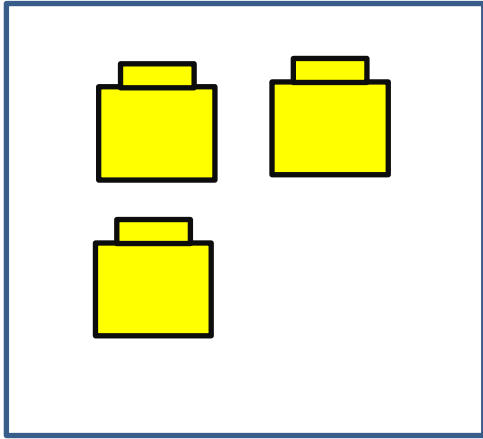
> *more than*



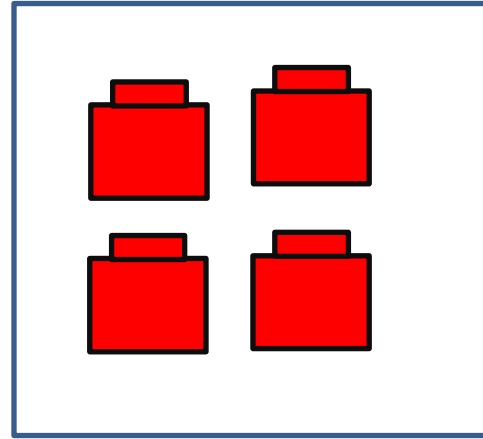
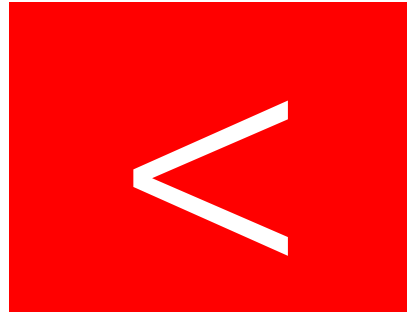
4



3

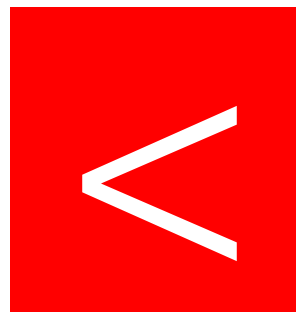
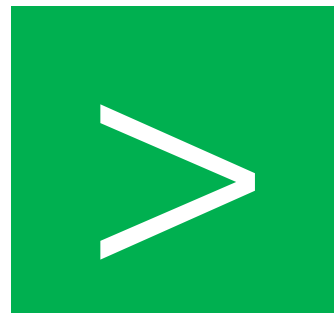


3

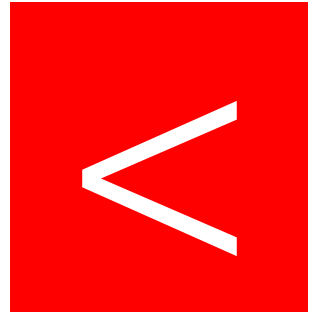
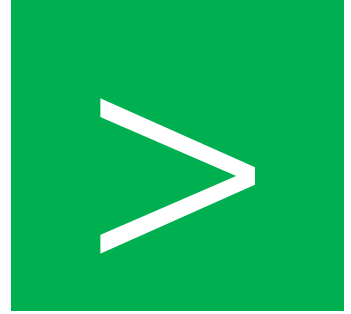


4

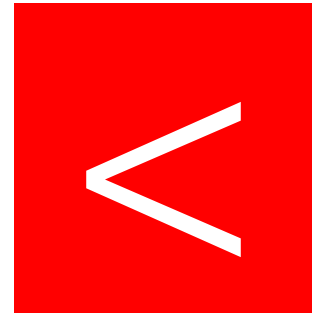
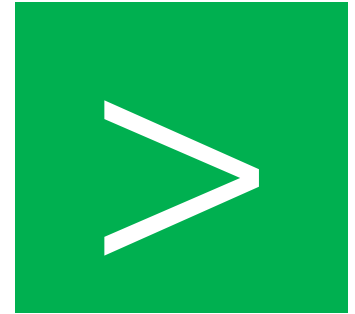
$$2 < 5$$



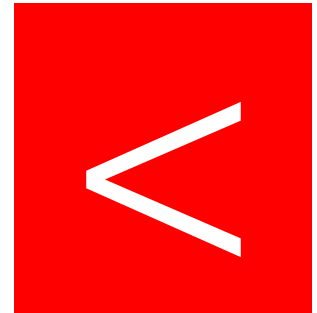
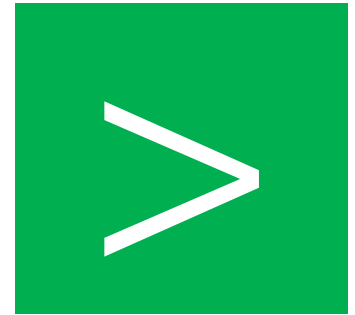
$$6 > 4$$



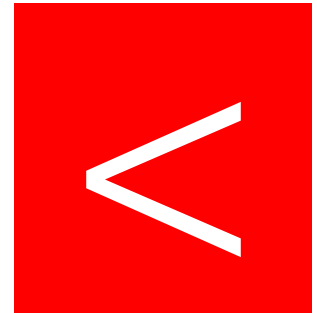
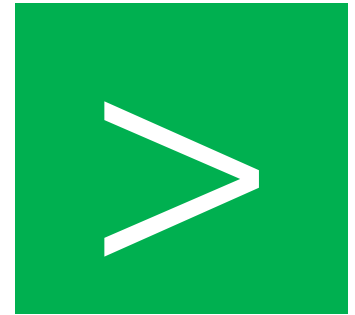
$$2 + 3 > 4$$



$$10 < 2 \times 6$$

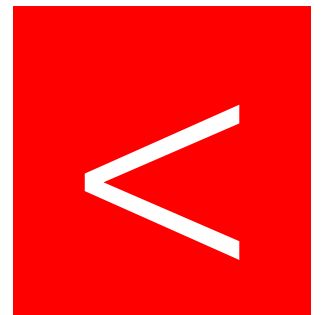
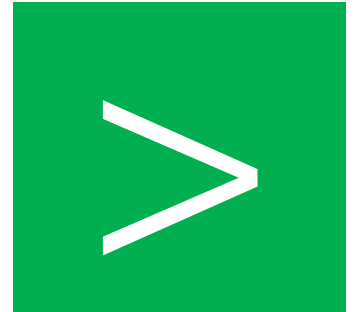


$$3 \times 5 > 2 \times 6$$



$$29 + 15 < 50 - 4$$

$$29 + 1 + 14$$



Using only < or > sign

Insert the correct symbol

$$2 \times 9 < \frac{1}{2} \text{ of } 40$$

Using only < or > sign

Insert the correct symbol

$$40 - 17 > 7 \times 3$$

Tasks

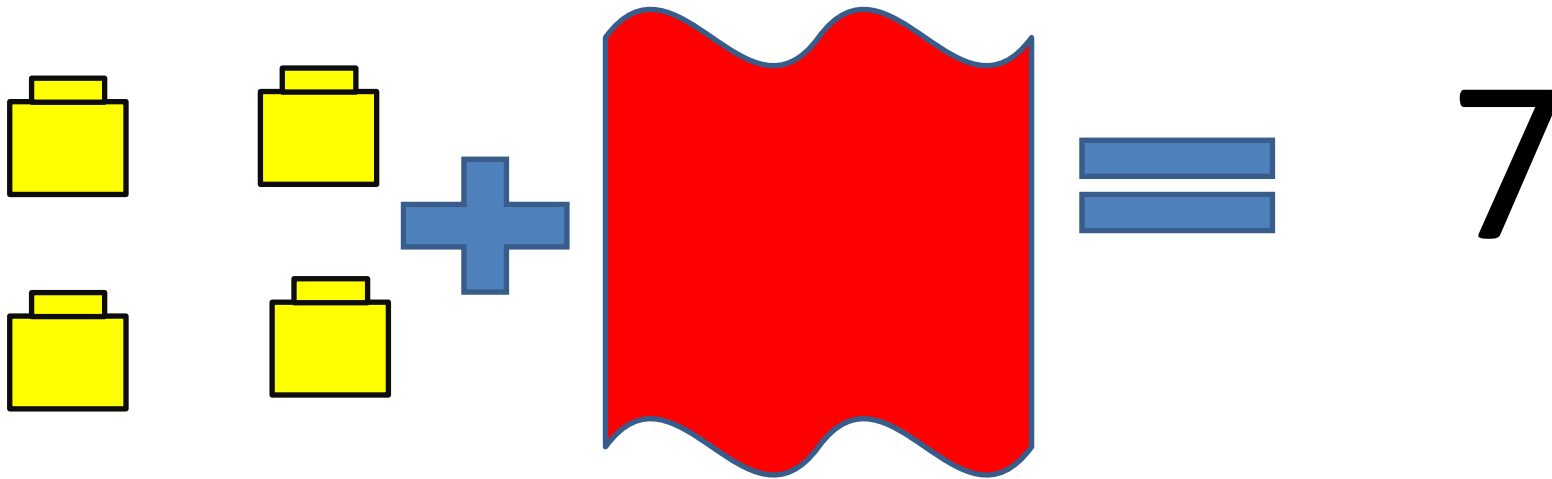
<https://www.countonus.org.uk/learning-together>

The image shows a screenshot of the Count On Us website. At the top is a black navigation bar with the logo 'count on us' and the tagline 'inspire, innovate, educate'. The navigation menu includes: Home, About, Numeracy BluePrints, CLPL & Classroom Visits, Resources (with a dropdown arrow), Online Store, and Contact. Below the navigation bar is a grid of three session cards for 'Session 7' on '23rd June 10am - 10.45am', all focused on 'Algebra'. Each card has a button at the bottom: 'Slides' on the left, 'Tasks' in the middle, and 'YouTube' on the right. A large blue arrow points upwards from the bottom center of the page towards the 'Tasks' button on the middle card. The page is decorated with various colorful geometric icons like squares, triangles, and circles with mathematical symbols.

Slides	TASKS	YouTube
Session 7 23rd June 10am - 10.45am	Session 7 23rd June 10am - 10.45am	Session 7 23rd June 10am - 10.45am
Algebra	Algebra	Algebra
Slides	Tasks	YouTube

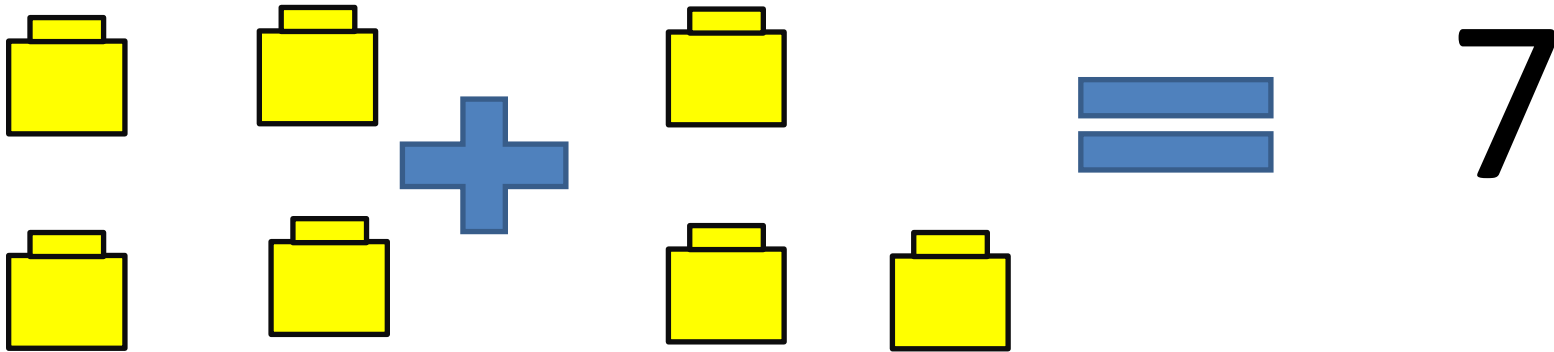
There are 7 yellow cubes altogether.
How many are under the red flag?

$$4 + \diamond = 7$$



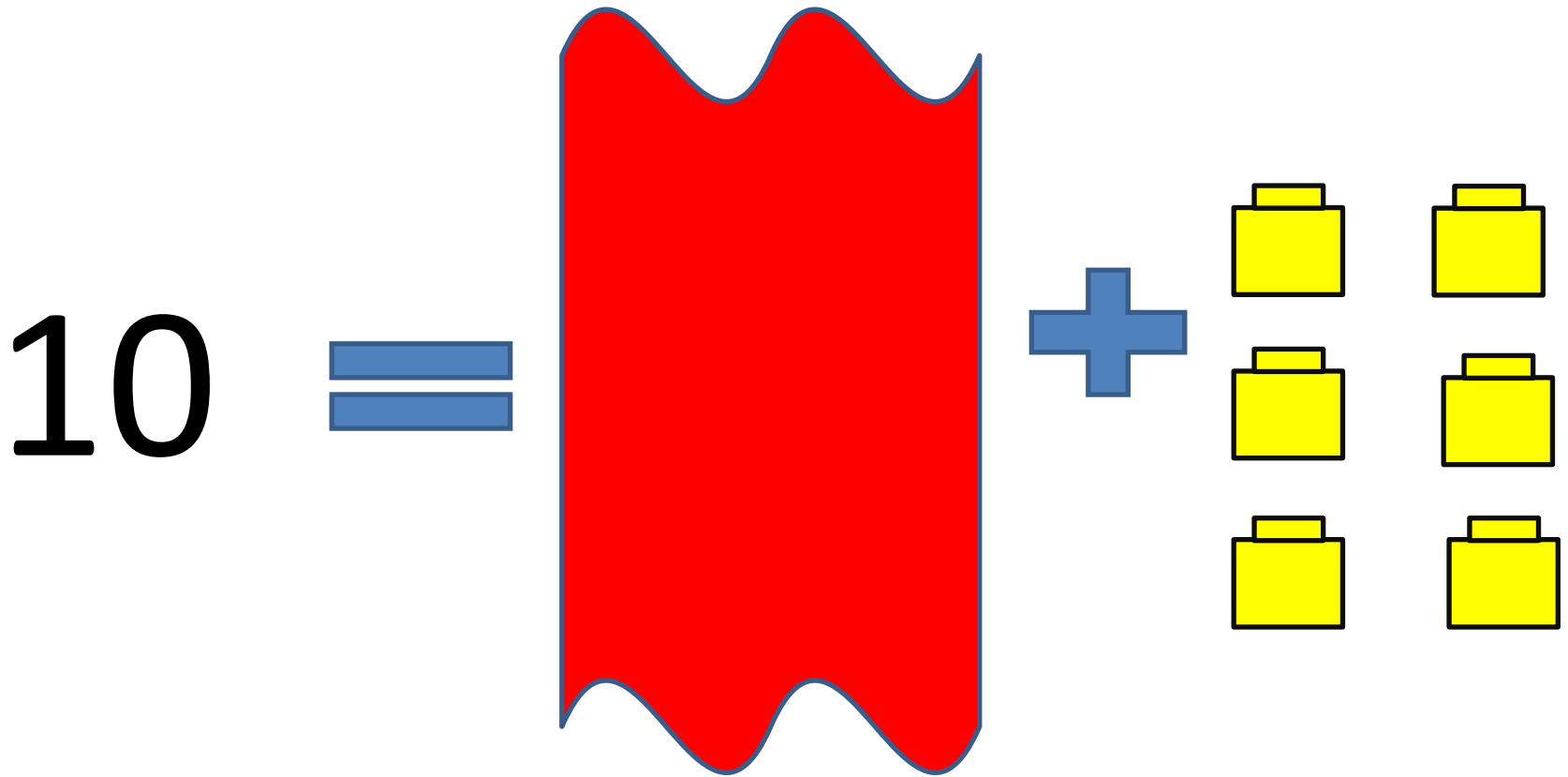
There are 7 yellow cubes altogether.
How many are under the red flag?

$$4 + 3 = 7$$



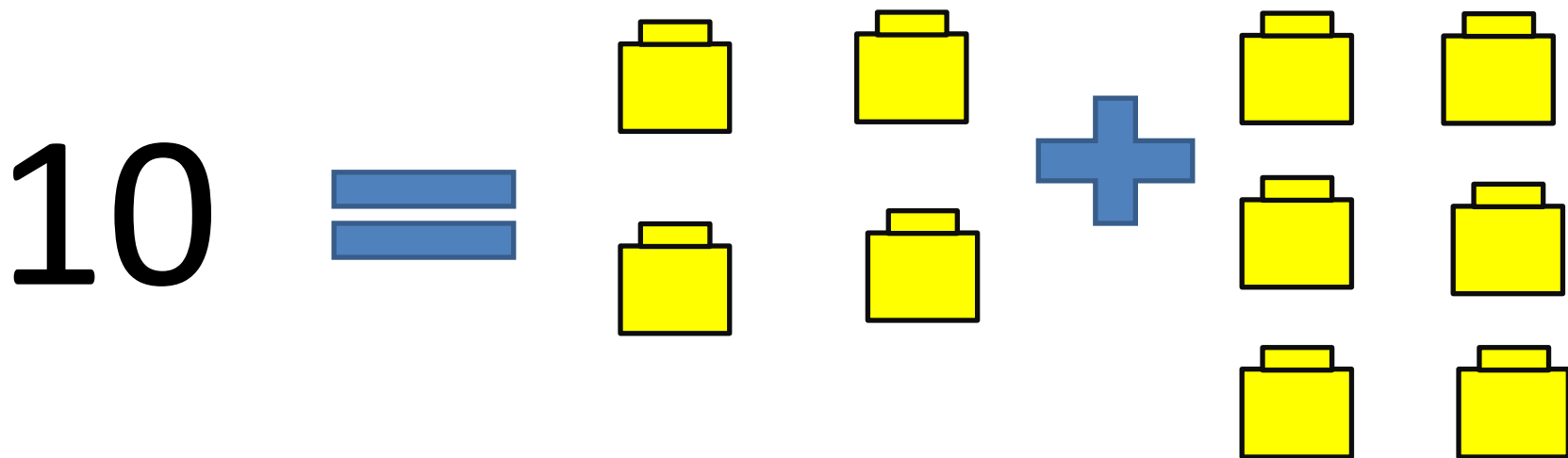
There are 10 yellow cubes altogether.
How many are under the red flag?

$$10 = ? + 6$$

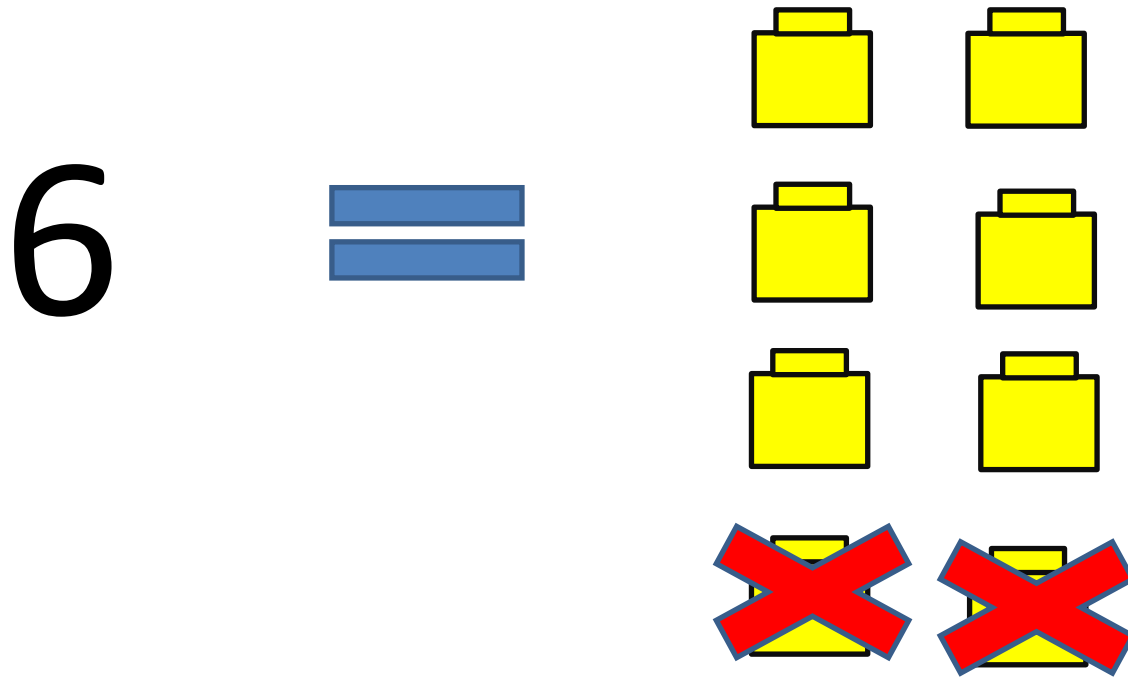


There are 10 yellow cubes altogether.
How many are under the red flag?

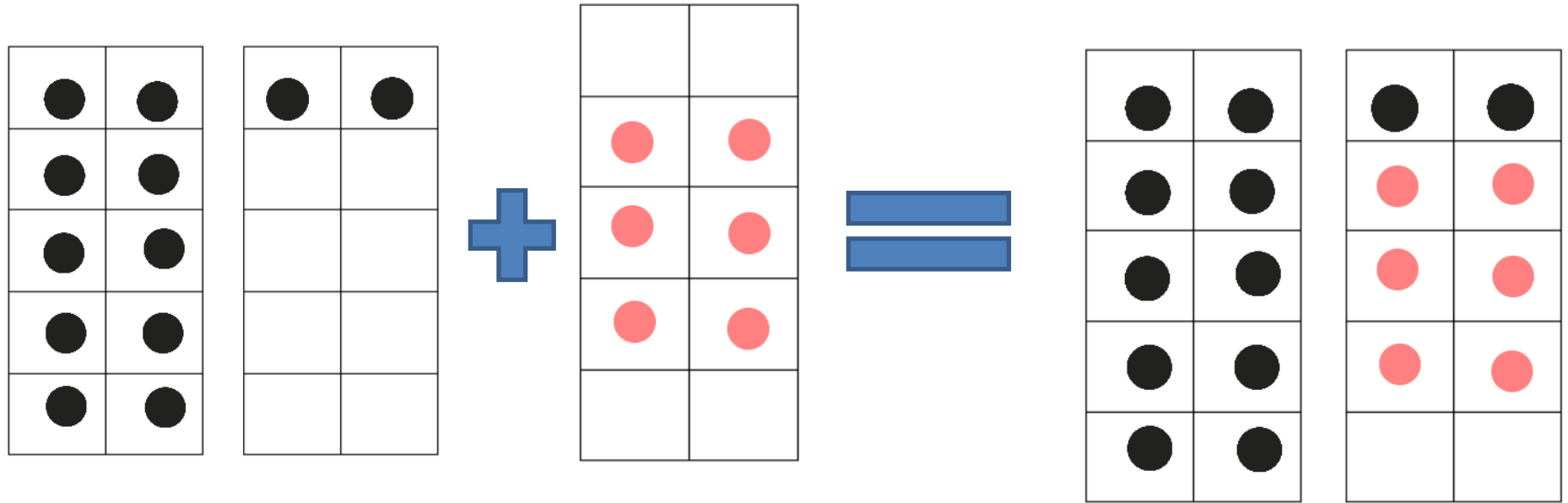
$$10 = 4 + 6$$



$$6 = 8 - \boxed{2}$$



$$12 + \boxed{6} = 18$$



$$12 + \boxed{6} = 18$$

$$12 + x = 18$$

$$\text{so } x = 6$$

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$$\boxed{9} - 2 = 7$$

$$x - 2 = 7$$

$$\text{so } x = 9$$

IT IS NOTHING NEW

$$5 \times \boxed{3} = 15$$

$$5 \times a = 15$$

$$\text{so } a = 3$$

IT IS NOTHING NEW

$$14 = \boxed{2} \times 7$$

$$14 = a \times 7$$

$$\text{so } a = 2$$

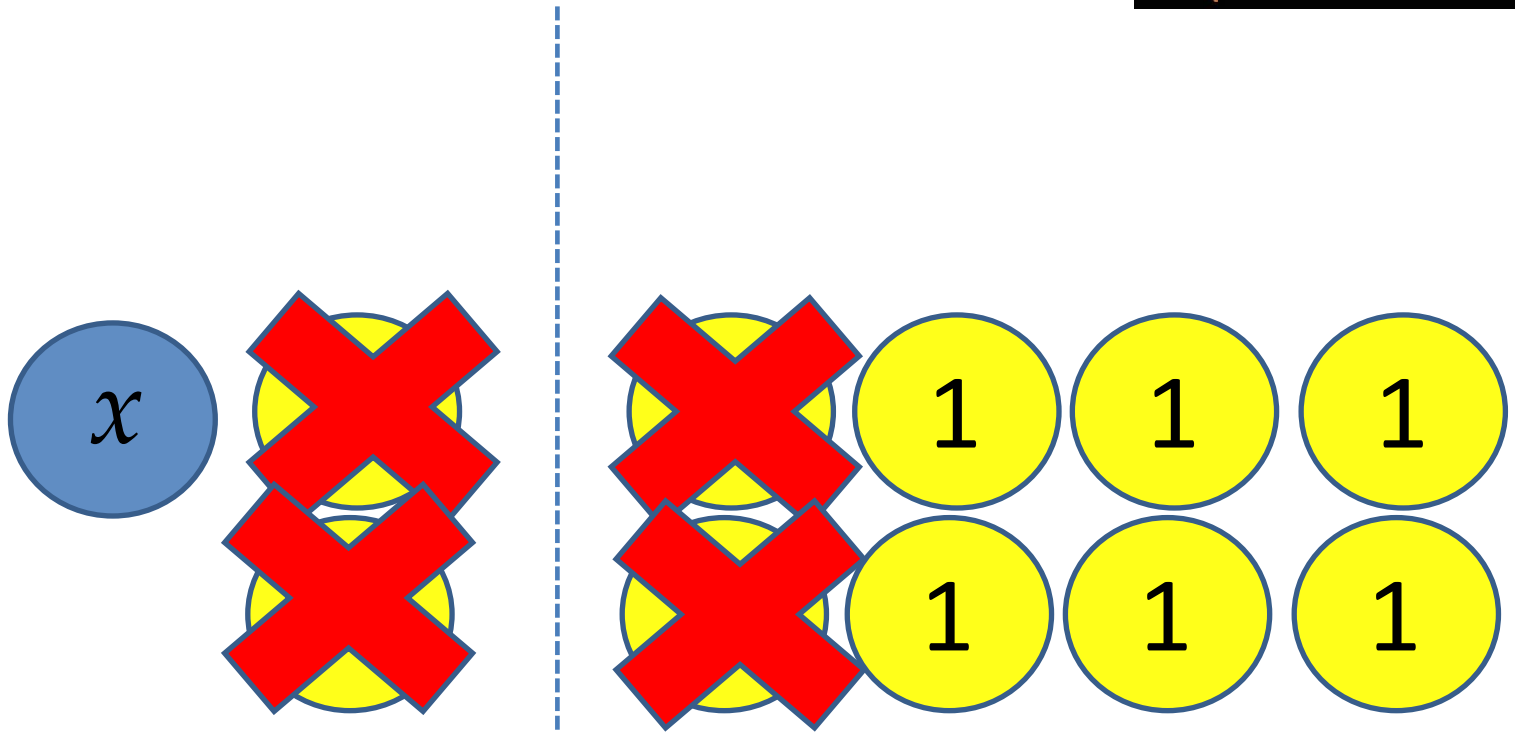
IT IS NOTHING NEW

$$\text{Solve } x + 2 = 8$$

IT IS NOTHING NEW

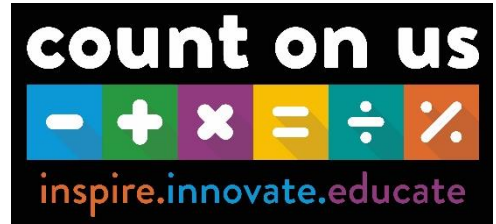
$$\square + 2 = 8$$

Solve $x + 2 = 8$

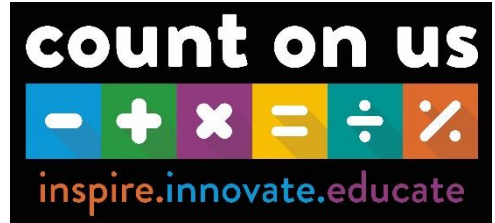
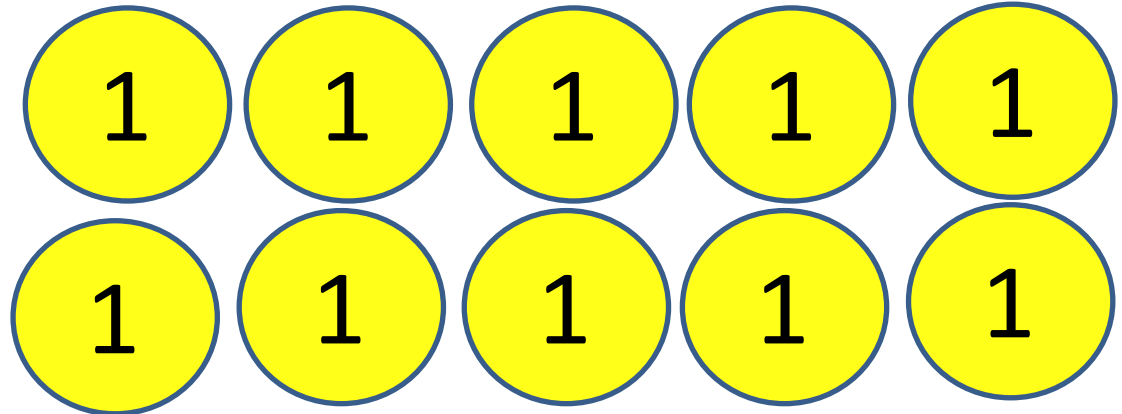
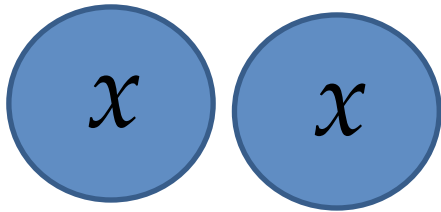


$x = 6$

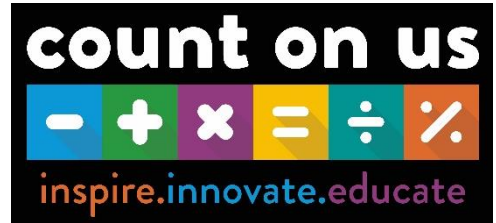
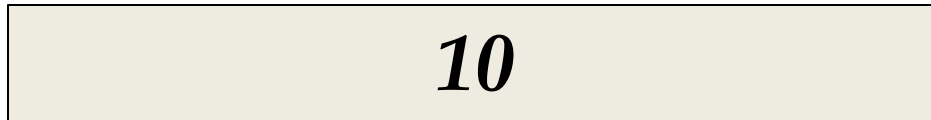
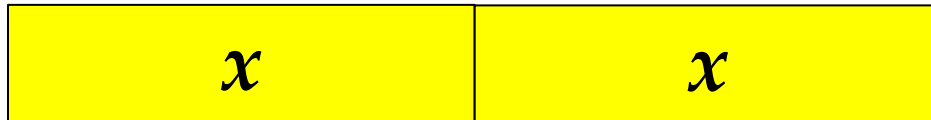
Solve $x + 2 = 8$



Solve $2x = 10$



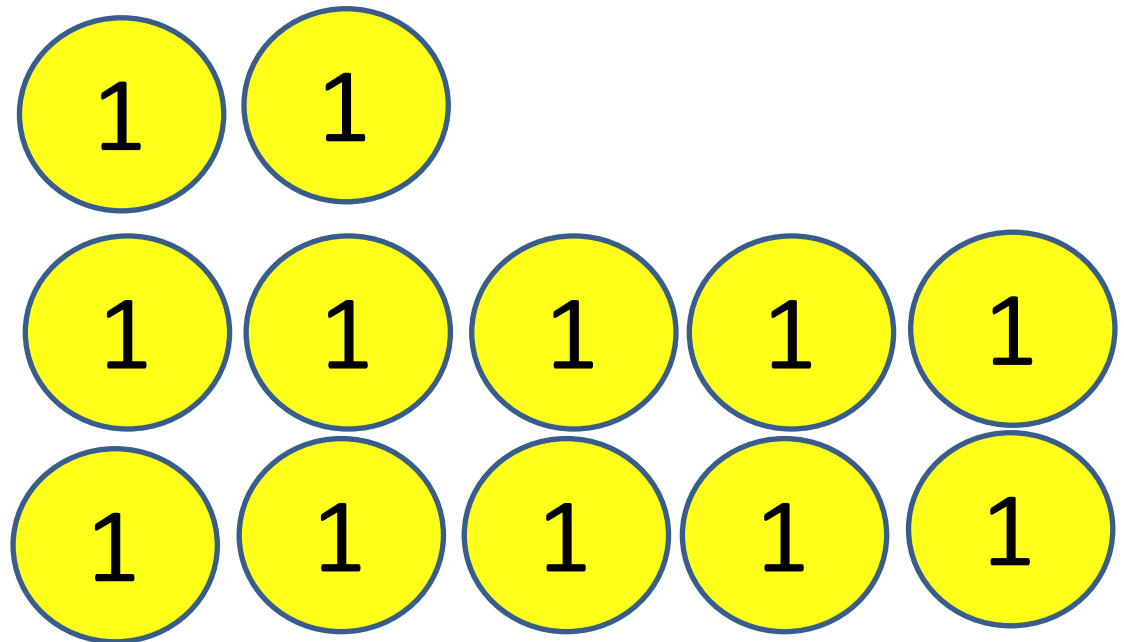
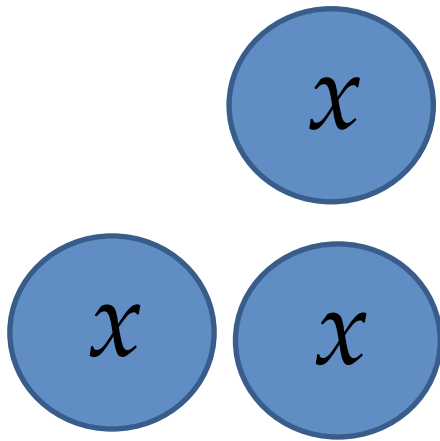
Solve $2x = 10$



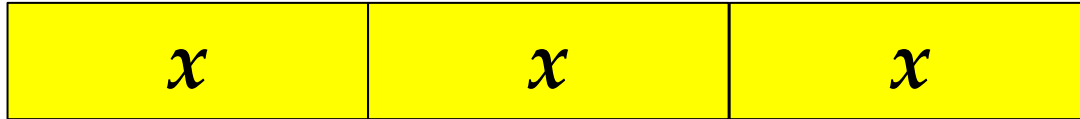
So $x = 10 \div 2$

So $x = 5$

Solve $3x = 12$



Solve $3x = 12$



So $x = 12 \div 3$

So $x = 4$

Always important to relate to other facts

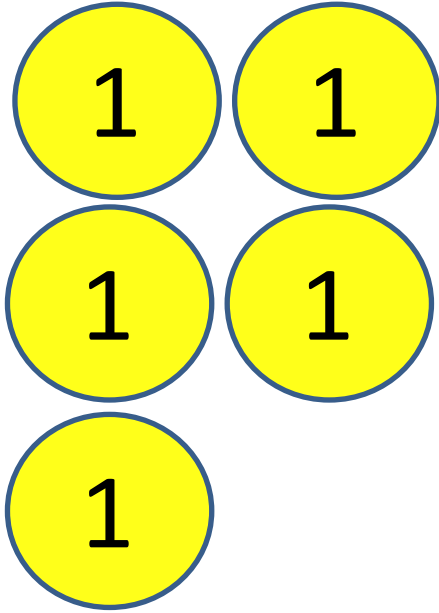
$4 \times 3 = 12$

$3 \times 4 = 12$

$12 \div 4 = 3$

$\frac{1}{3}$ of 12 = 4

What do you see?



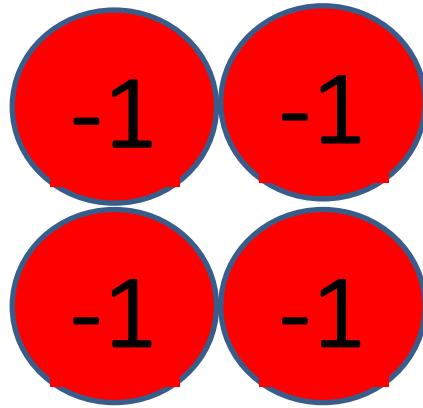
Total = 5

What do you see?

count on us

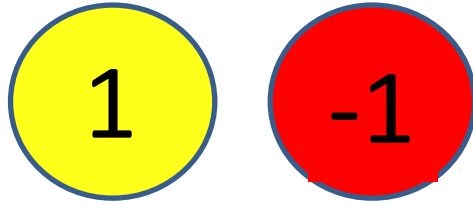


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Total = -4

What do you see?



Total = 0

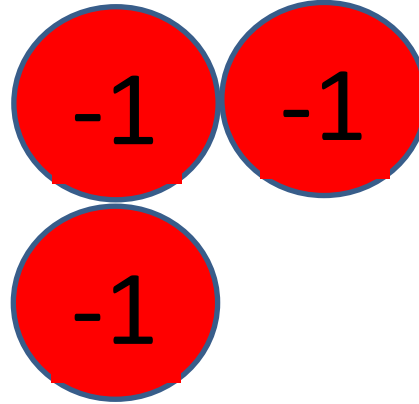
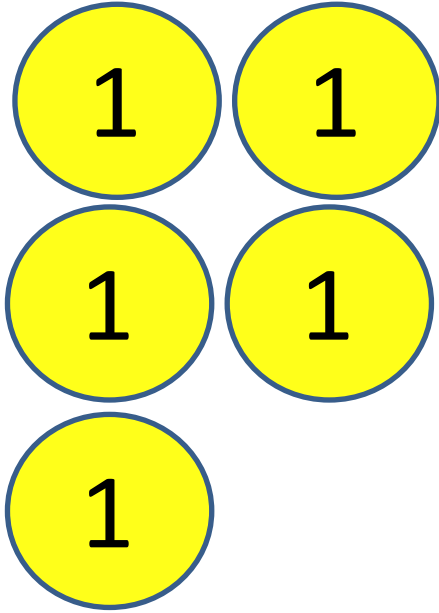
This is referred to as a 0 pair

count on us

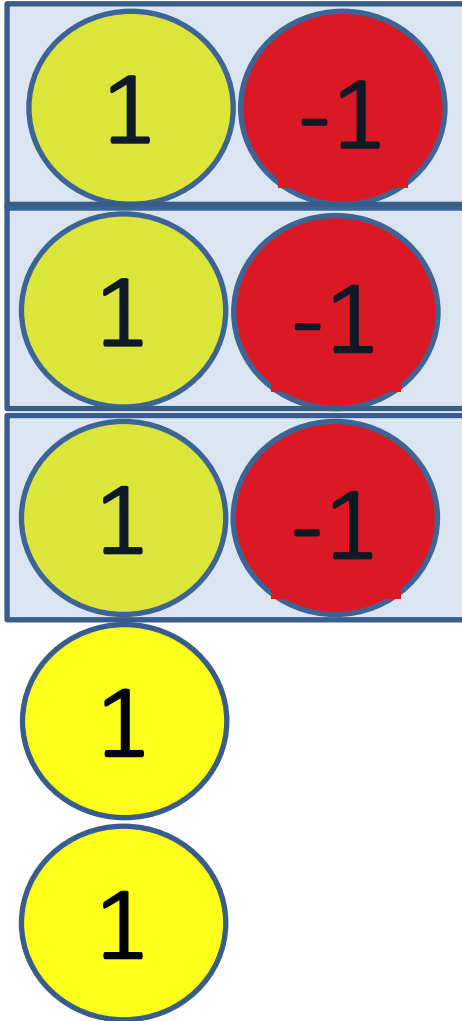


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What do you see?

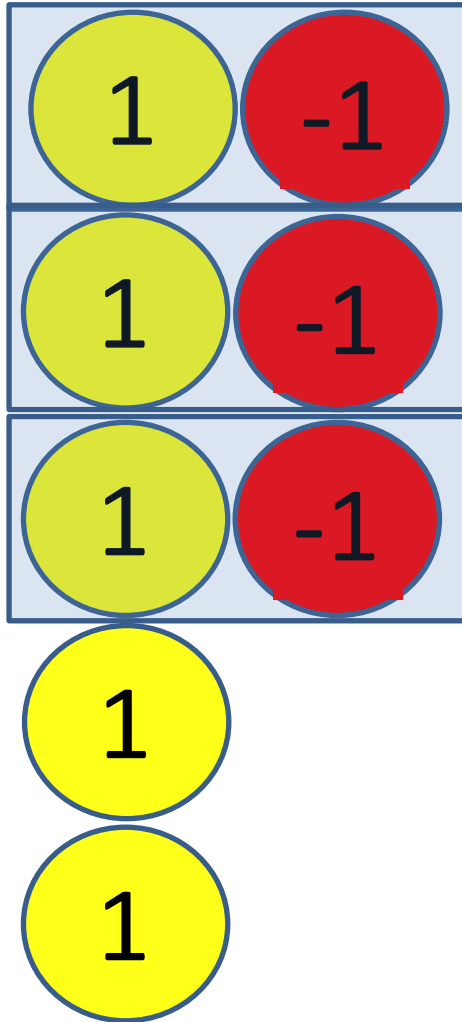


What do you see?



Total = 2

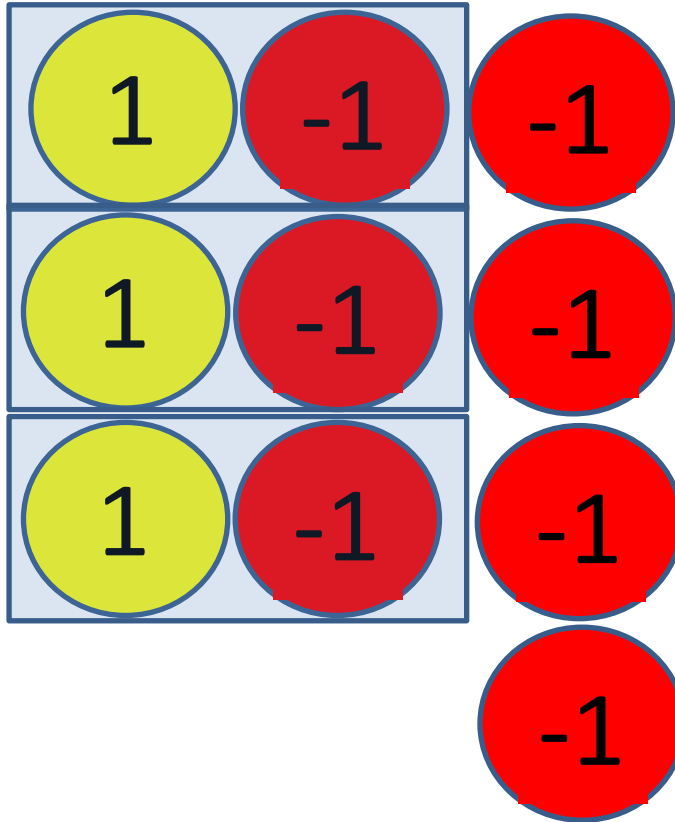
What do you see?



$$5 + (-3)$$

$$\text{Total} = 2$$

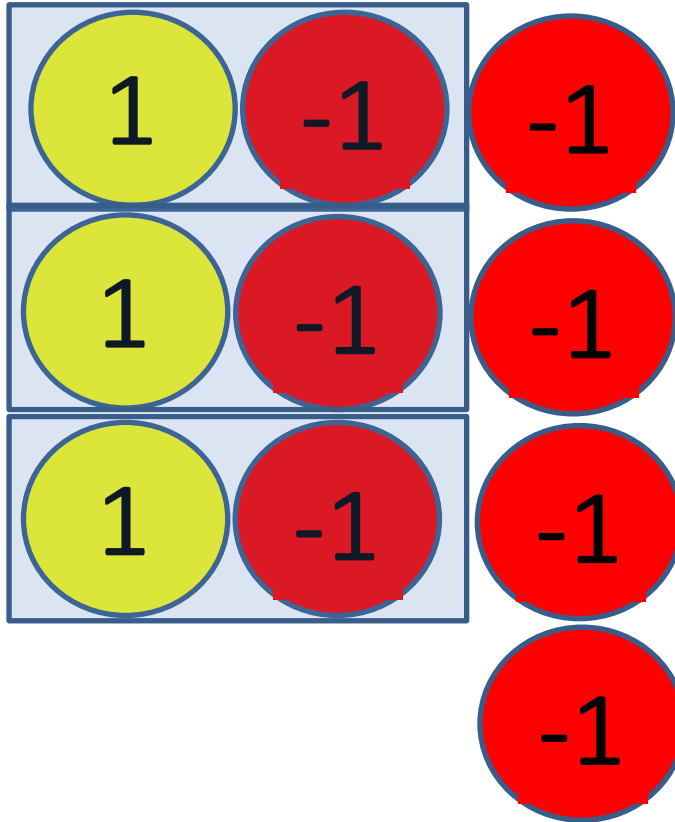
What do you see?



$$3 + (-7)$$

$$\text{Total} = -4$$

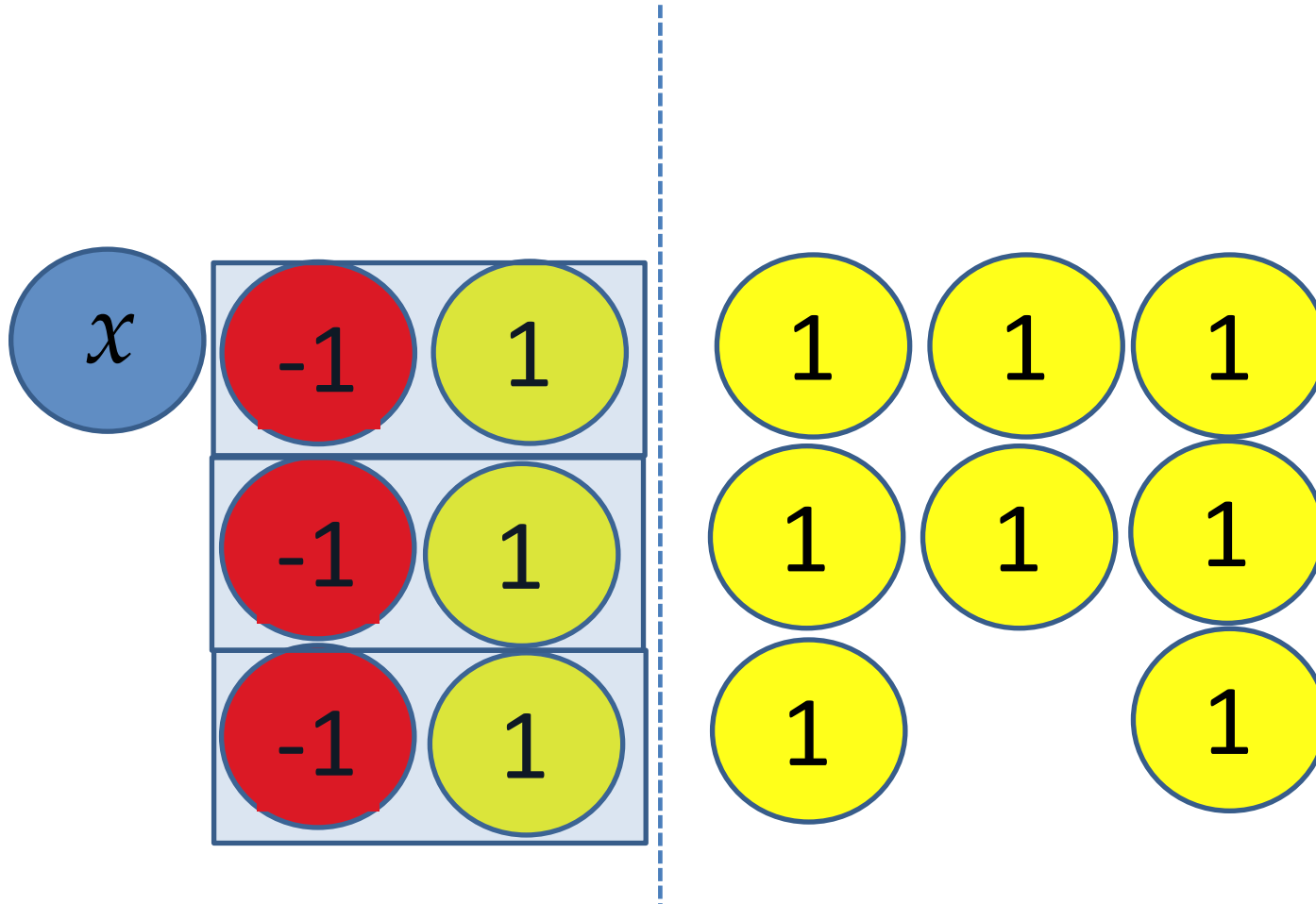
What do you see?



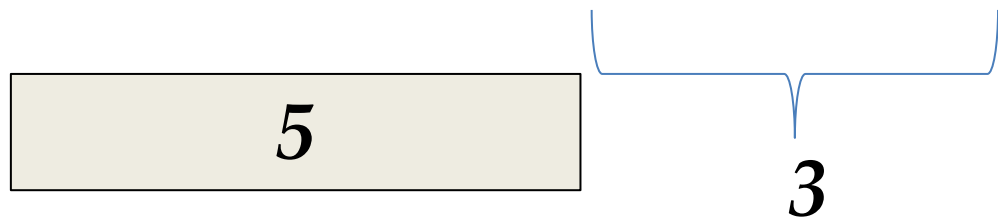
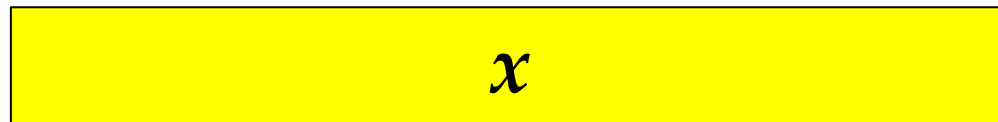
$$3 + (-7)$$

$$\text{Total} = -4$$

$$\text{Solve } x - 3 = 5$$



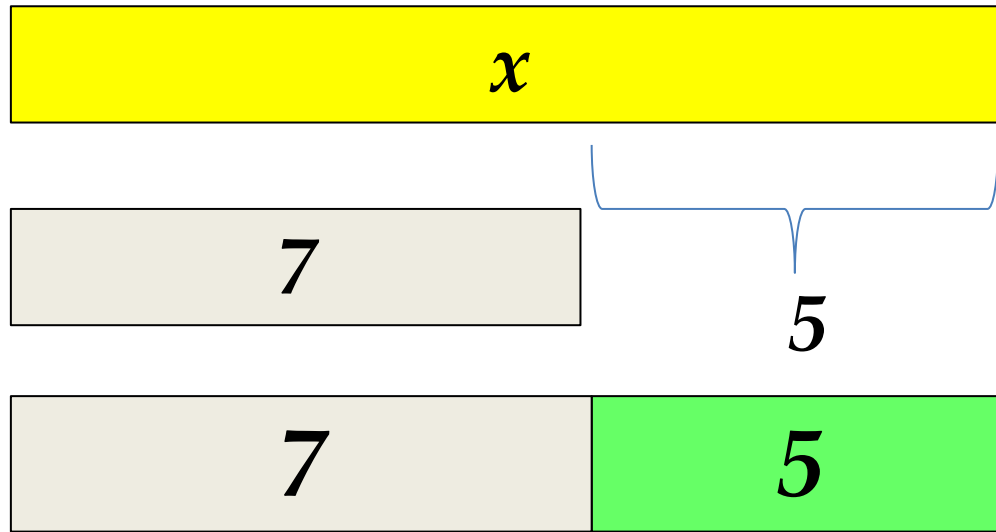
Solve $x - 3 = 5$



So $x = 5 + 3$

So $x = 8$

Solve $x - 5 = 7$



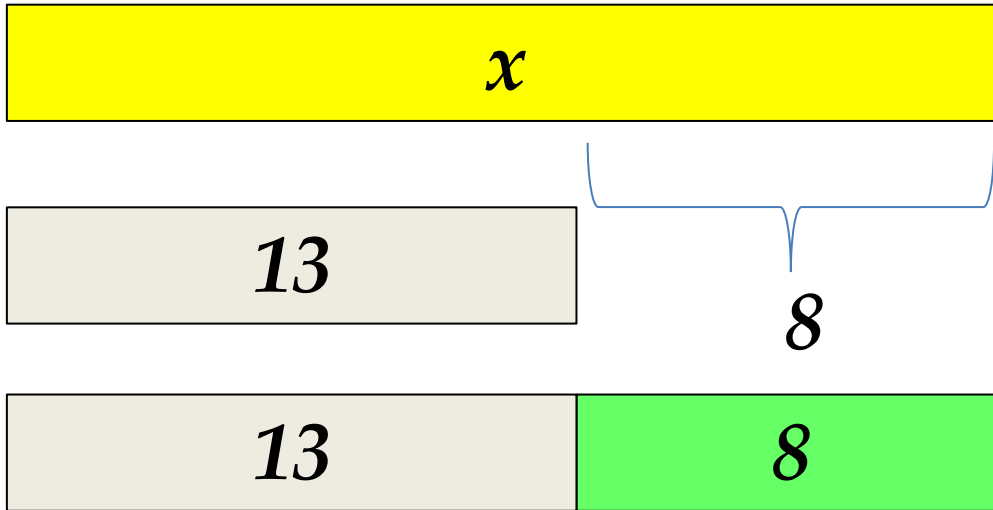
So $x = 7 + 5$

So $x = 12$

Check by substituting back into question $x - 5 = 7$

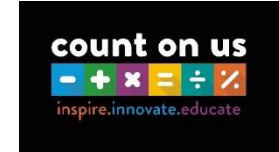
Check by substituting back into question $12 - 5 = 7$

Solve $x - 8 = 13$



So $x = 13 + 8$

So $x = 21$



Slides and resources at

www.countonus.org.uk/learning-together/

#npfsmaths



Slides and resources at

www.countonus.org.uk/learning-together/

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YouTube

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Thank You!

To help us continue to represent parents views, understand yours and your child's experiences of maths and numeracy, and to continue to improve the delivery of these sessions, we would appreciate your feedback.

<https://www.surveymonkey.co.uk/r/learningtogetherfeedback>



With support from Education Scotland and Scottish Government, building on themes emerging from the 'Making Maths Count' Group report

