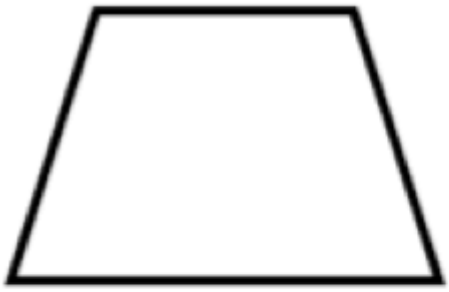
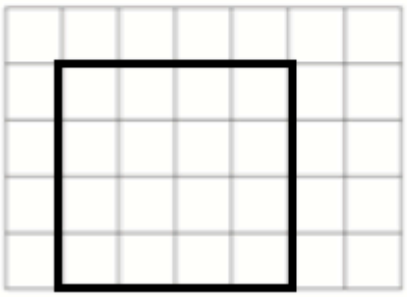
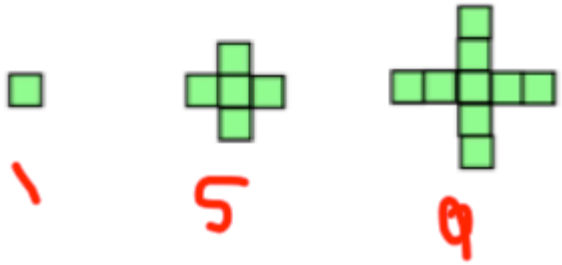
July 28th	5-a-day	Numeracy
Name this shape Trapezium		
	This is a centimetre grid. Draw a square with area 16cm²	
What number is needed to add to 7.8 to make 10. 2.2		
Simplify $8y + 3y$ 11y		
Calculate 124^2 15376		

July 28 | **5-a-day** | **Foundation**

Pattern number	1	2	3	4	5
Number of sticks	8	14	20	26	32

Complete the table.
How many sticks would be in Pattern number 10?

Patten 1 Patten 2 Patten 3



1 5 9

Draw Pattern 4 below

13

How many squares will be in pattern 10?

1 5 9 13 17
21 25 29 33 37

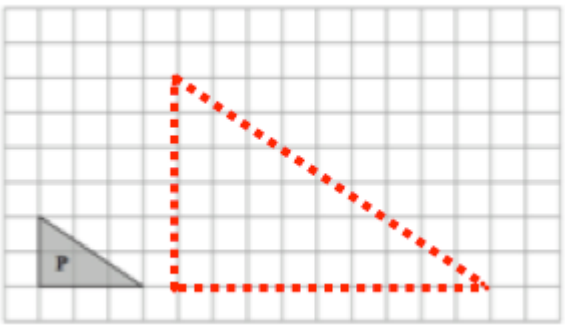
Write an expression for the number of squares in pattern n

$4n-3$

Solve $6w - 1 = 5w + 5$

$w - 1 = 5$

$w = 6$



Enlarge P by scale factor 3

July 28	5-a-day	Higher

A water tank is two-thirds full. A quarter of the water is poured out. What fraction of a tank is left?

$\frac{3}{4}$ of $\frac{2}{3}$

$\frac{3}{4} \times \frac{2}{3} = \frac{1}{2}$

Expand and simplify

$(x - 7)^2$

$(x-7)(x-7) =$

$x^2 - 14x + 49$

There are 5 red and 5 green counters in a bag.

Kellie takes out a counter, replaces it and takes out another.

What is the probability of two reds?

$\frac{5}{10} \times \frac{5}{10} = \frac{25}{100}$

$\frac{1}{4}$

Solve

$$\frac{3}{2x - 1} - \frac{4}{3x - 1} = 1$$

x is a positive constant.

$\frac{3(3x-1) - 4(2x-1)}{(2x-1)(3x-1)} = 1$

$\frac{9x - 3 - 8x + 4}{(2x-1)(3x-1)} = 1$

$\frac{x+1}{(2x-1)(3x-1)} = 1$

$x + 1 = (2x-1)(3x-1)$

$x + 1 = 6x^2 - 2x - 3x + 1$

$0 = 6x^2 - 6x$

$0 = 6x(x-1)$

$x \neq 0$ or $x = 1$