

Starter

1. Expand the brackets and simplify

a. $(2x - 3)(x - 8)$

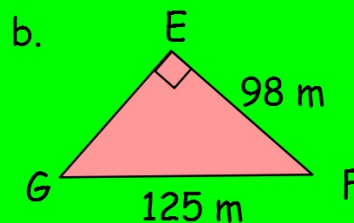
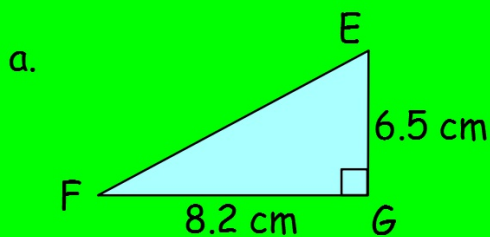
b. $5(x - 3) - (x + 6)(x + 9)$

2. Sarah trades in her iPhone 4s because she decides she wants to buy a Samsung Galaxy S4.

The O2 store give Sarah £149.99 for her iPhone which is 70% less than what she paid for it.

How much did she pay for the iPhone?

3. Find the size of angle GFE in each triangle below.



Starter

1. Expand the brackets and simplify

a. $4x - 3x(x - 7) + 5x^2$

b. $(p - 5)(p^2 - 4p + 7)$

2. A straight line passes through the points $(-2, 3)$ and $(0, -7)$.
Find the equation of the line.

3. Valentini's in Giffnock sell large tubs of ice cream in cylindrical containers with diameter 10cm and height 12.74cm.

a. What is the volume of a tub correct to 1 s.f.?

Each "ice cream cone" consists of a cone with a hemisphere on top. The cone has a height of 8cm and a radius 1.8cm.

b. How many full cones can be made from a large tub?

Starter

1. Expand the brackets and simplify

a. $(x - 7)(x + 5)$

b. $3(f + 3)(2f + 5)$

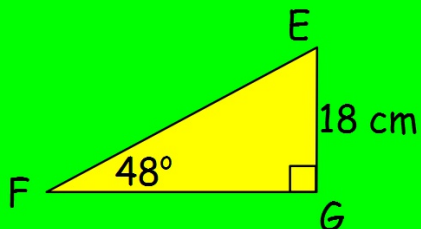
c. $5 - 2(k - 5)(k - 7)$

2. A house is valued at £225,000 before it appreciates at a steady rate of 5.1% per annum for 7 years.

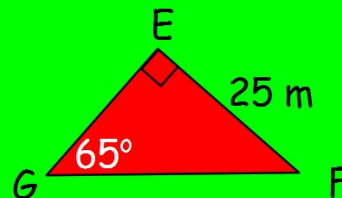
What is the new value of the house?

3. Find the length of GF in each triangle below.

a.



b.



Starter

1. Expand the brackets and simplify

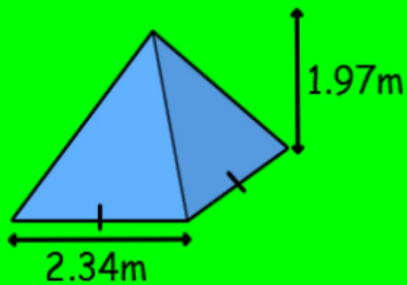
a. $4(j - 3)(3j + 2)$

b. $7 - (u + 6)(u^2 - 5u - 3)$

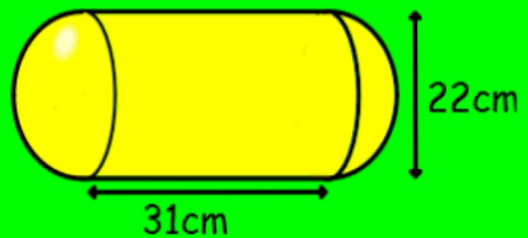
2. Donna's score for her English folio improved from 19 to 22.
Express the increase in her score as a percentage of her original mark.

3. Find the volume of each shape shown below.

a.



b.



Starter

1. Calculate

a. $\frac{1}{5} + \frac{2}{3}$

b. $4\frac{1}{5} \times 2\frac{1}{7}$

2. Expand the brackets and simplify

a. $(g + 7)(g - 4)$

b. $3(p + 2)(p - 6)$

c. $(4d - 9)(4d + 9)$

3. Find the equation of the line which is parallel to $x - 7y = 8$ and which passes through $(0, -8)$.

4. Fully factorise

a. $9x^2 - 1$

b. $x^2 + 8x + 7$

c. $x^2 - x - 20$