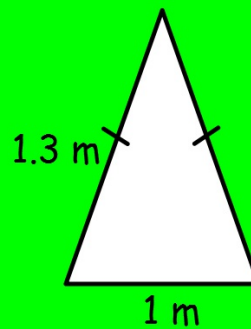
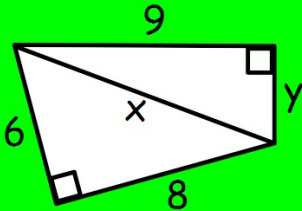


## Starter

1. A circular garden pond has a radius of 1.5 m. Calculate its area.
2. David invested £300 in an account which offered 4.2% interest p.a. How much compound interest would David earn over 3 years?
3. Two numbers have a l.c.m. of 24 and a h.c.f. of 2. What are they?
4. For this isosceles triangle, calculate its
  - a. height
  - b. area



## Starter

1. In 2006 the population of Turriff was 17406.  
By 2016 it had dropped to 16637.  
Find the percentage decrease in population.
2. The circular face of a wall clock is edged with a glitter border.  
If the clock has a diameter of 30 cm, find the length of the glitter border.
3. Use Pythagoras' Theorem to calculate the value of  $x$  and  $y$  in this diagram:  

4. Calculate the original cost of a bicycle which is priced at £468 with 20% off.

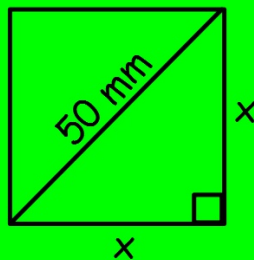
## Starter

1. A sector of a circle has a radius of 12 cm and an angle of  $48^\circ$  at its centre.  
Find the area of the sector.

2. Arthur earns £26420 every year. If he saves £300 each month, what percentage of his salary does he save?

3. Find a.  $3\frac{1}{6} - 2\frac{3}{4}$                       b.  $2\frac{7}{8} \times 4$

4. Find the value of x:



## Starter

1. Solve

a.  $4(2x + 5) = 8 - 3(x + 7)$

b.  $5x + 6(x + 1) = x - 2(x - 3)$

2. A sector of a circle has a radius of 20 cm and an angle of  $51^\circ$  at its centre.

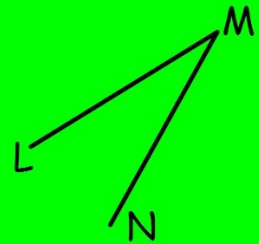
Find the arc length.

3. Belle bought a car for £6545. In the first year the value depreciated by 22%, in the second year by 18% and in the third year by 15%. How much was the car worth after 3 years?

4. From the lighthouse, L, ship M is on bearing  $038^\circ$ .

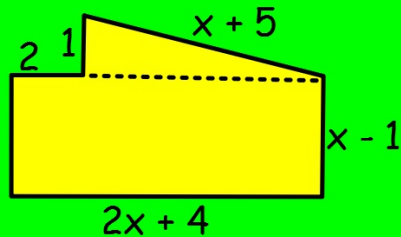
From M, the bearing of ship N is  $195^\circ$ .

Find the size of angle LMN.



## Starter

1. Express 240 as a product of prime factors.
2. Find an expression for the perimeter of this shape:



3. Niall earns a basic wage of £300 per week plus 12% commission on all sales made.  
What were the value of his sales in a week where his wage was £570?
4. A circular coffee table has a top with an area of  $4.52 \text{ m}^2$ .  
Find its radius.