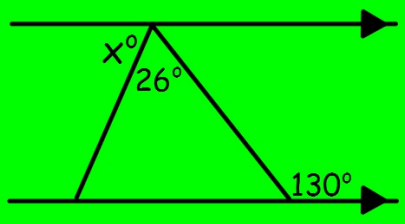
Starter

1. Find the following
   a. 25% of 9000 km b. $^{7}/_{8}$ of 6820 hectares

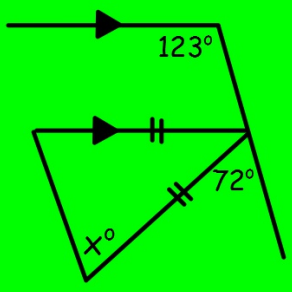
2. Solve
   a. $6(2x - 3) = 6$ b. $7(x - 4) = 4(2x + 5)$ c. $10 - 2(x - 5) = 3$

3. Calculate the following
   a. $^{16}/_{3} + {}^{1}/_{5}$ b. $2^{3}/_{4} - 1^{2}/_{3}$ c. $12 \div {}^{4}/_{9}$

4. Find the size of angle x°
   a.



   b.



Starter

1. Find the following
   a. 38% of £6420
   b. $^{3}/_{7}$ of 1694 miles

2. Calculate the following
   a. $2^{1}/_{8} + 3^{2}/_{3}$
   b. $^{12}/_{7} \times 4^{1}/_{4}$
   c. $2^{7}/_{10} \div 2^{5}/_{8}$

3. Solve
   a. $2(3x + 1) = 3(x + 2)$
   b. $13 - 4(x + 1) - 3(x - 2) = 1$

4. Factorise the following:
   a. $20f - 45p$
   b. $16r^4p^2 - 12r^3p^4$

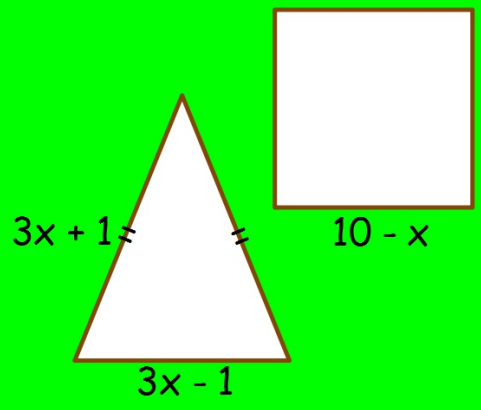
Starter

1. Convert the following to m
   a. 189 cm b. 0.526 km c. 2700 mm

2. The ratio of the volume of small:large printer ink refills is 5:8.
   The small refill holds 40 mL.
   Calculate the volume of the large refill.

3. Calculate the following
   a. $2^{5}/_{6} - 1^{11}/_{18} + 2^{2}/_{3}$ b. $({}^{2}/_{5})^{2}$

4. Each of these mirrors
   (an isosceles triangle and a square)
   has the same perimeter of wooden frame.
   Find the lengths of wood required for
   each side of the mirror.



Starter

1. Round the following to 2 s.f.
   a. 568720 b. 0.9327 c. 1.9872

2. Solve
   a. $6(3x - 2) = 10x + 4$ b. $20 + 3(2x + 5) - (x - 6) = 20$

3. Calculate the following
   a. $7^2/_7 - 2^1/_2$ b. $1^3/_{10} \div 5^1/_5$ c. $^3/_8 \times (1^1/_3)^2$

4. The ratio of the lengths of the three sides of a right-angled triangle is 5:12:13.
   The perimeter of the triangle is 270 cm.
   Calculate the lengths of the sides.

Starter

1. Find the following
   a. 17.5% of $450 b. $^{4}/_{11}$ of 209 kg

2. Fully factorise
   a. $5fgh - 25fg^2$ b. $18ab^4 - 6ab$ c. $28xyz^2 - 56xy^2z$

3. Water flows through a pipe at a rate of $2^{2}/_{5}$ litre per second.
   How long does it take for
   (i) 60 litres (ii) $7^{1}/_{2}$ litres to pass through the pipe?

4. Find the sizes of all the angles
   in this isosceles triangle