

Starter

1. Simplify the following fractions

a. $\frac{4}{12}$

b. $\frac{16}{40}$

c. $\frac{27}{63}$

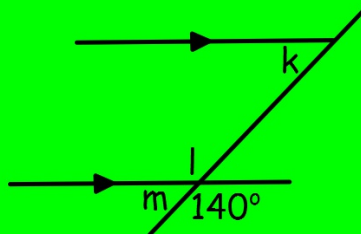
2. Factorise fully

a. $4xy - 12x$

b. $27a^2b + 9ab$

c. $16f^2gh^2 - 24fgh^2$

3. Find the size of angles
k, l, and m.



4. Solve the following equations

a. $5x - 6 = 2x + 3$

b. $10 + 2j = 3j - 2$

c. $2y - 5 = 5 + 4y$

Starter

1. Change the following to improper fractions

a. $1\frac{5}{6}$

b. $3\frac{4}{7}$

c. $4\frac{3}{8}$

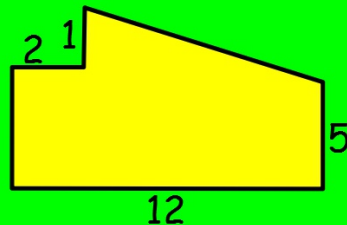
2. If $g = (-1)$, $h = 4$, and $i = 10$, evaluate

a. $gh - 3i$

b. $h^2 + g^2i$

c. $i + (g - h)^2$

3. Find the area of the following shape



4. Height is sometimes measured in "feet".

To change feet to metres, multiply by 0.305.

Jamie is a basketball player and is 7 feet tall.

How tall is he in metres?

Starter

1. Change the following to mixed fractions

a. $\frac{9}{7}$

b. $\frac{16}{3}$

c. $\frac{25}{4}$

2. Factorise

a. $6xy + 24y^2$

b. $63a^2bc - 27ab^2$

3. Solve the following equations

a. $7f + 2 = 6f - 3$

b. $10x - 4 = 5 + x$

c. $5 - 2a = 5a + 12$

4. 300 sheets of light card make a pile 3.6 cm thick.

Calculate the thickness of one sheet of card in millimetres.

Starter

1. Round to 2 s.f.

a. 654801

b. 0.9177

c. 10.89

2. If $p = 5$, $q = (-4)$, and $r = 2$, evaluate

a. $3pqr$

b. $2q + pr^2$

c. $(r - p)^3 + q^2$

3. Find the following

a. $\frac{2}{7} + \frac{4}{7}$

b. $\frac{3}{8} + \frac{1}{4}$

c. $\frac{7}{9} - \frac{2}{3}$

4. A roll contains 15 m of ribbon.

Charity workers are making twists of ribbon using 10 cm per twist.

a. How many can they make from the roll of ribbon?

b. The ribbons are sold for 20p each.

How much money will they make if they sell them all?

Starter

1. Find

a. 32.5% of \$4400

b. $\frac{5}{9}$ of £112.50

2. Multiply out the brackets and simplify

a. $4(2x - 5) + 3(4x + 7) - (x + 1)$

b. $10 - 2(6x - 1)$

3. Find the following

a. $1\frac{3}{4} + \frac{2}{3}$

b. $3\frac{1}{9} - 1\frac{3}{4}$

c. $12 - 3\frac{2}{7}$

4. John thinks of a number.

He multiplies it by 9. He then subtracts 54.

If the answer is 6, what number did John think of?