

Starter

1. Solve

a. $6(g - 5) = 4g + 11$

b. $1 - 3(6 - 4m) = 2(3m + 4)$

2. Find the equation of the straight line which passes through

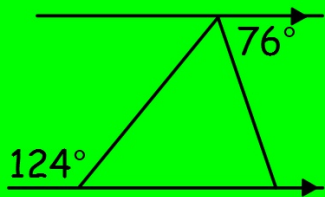
a. $(-2, 5)$ and $(0, 15)$

b. $(0, -1)$ and $(-3, 8)$

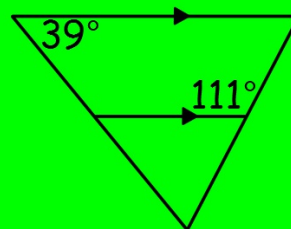
3. Find the area of a circle with radius 4.32 mm.

4. Complete all the missing angles in the diagrams below.

a.



b.



Starter

1. Expand and simplify

a. $4(2t - 3)$

b. $5(3 - p) + 2(p - 5)$

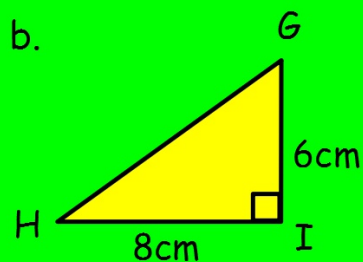
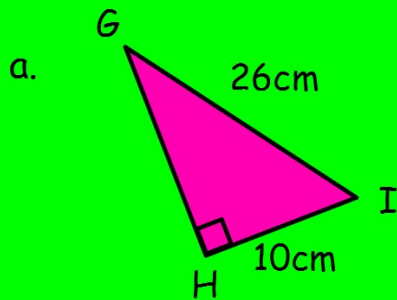
c. $6(z - 3) - 3(4 - 3z)$

2. A house is valued at £155,000.

If it appreciates at a rate of 3.16% p.a. for 3 years, what is the new value of the house?

Give your answer correct to 2 significant figures.

3. Find the length of the side marked GH in each triangle below.



Starter

1. Solve the following equations:

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

b. $7 - 3(5e - 2) - 4(2e + 3) = 10$

2. List the 5-figure summary for this data set

12, 26, 27, 19, 16, 29, 34, 18, 19, 13, 35

3. Paul is trying to build muscle mass by following a strict exercise program. When beginning the program at the start of March he weighs 65kg. He then weighs himself at the start of April and weighs 68.2kg.

a. Express his increase as a percentage of his March weight.

b. If Paul's weight continues to increase as this rate, what will his expected weight be at the start of August?

Give your answer to 2 decimal places.

Starter

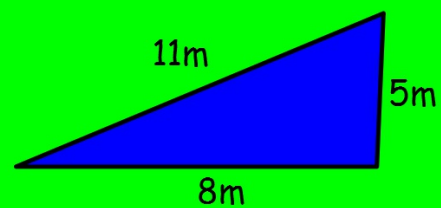
1. Calculate

a. $\frac{4}{5} + \frac{2}{3}$

b. $2\frac{2}{3} - 1\frac{1}{5}$

c. $1\frac{4}{5} \times 15$

2. Explain why the triangle below is not right-angled.
(non-calc).



3. The ages of players in a chess tournament are given below.

65, 47, 52, 58, 63, 68, 55, 49, 52, 53, 70, 44

- Present the data in an ordered stem and leaf diagram.
- Hence, find the five figure summary for the data.

Starter

1. Calculate

a. 2.64×700

b. $3.2 \div (50 \times 80)$

2. Fully factorise

a. $6p^2 + 21$

b. $25xy^2 - 50x^3y$

c. $64a^2b^3c + 24ab^3c^2$

3. Harry threw three darts at a dart board twenty times and recorded his scores. They are shown below.

78, 56, 64, 68, 72, 61, 45, 76, 84, 91

77, 76, 54, 64, 81, 88, 69, 59, 78, 62

- Present the data in an ordered stem and leaf diagram.
- Hence, or otherwise, find the five figure summary for this data.
- What is the semi-interquartile range for this data?