

MATHS TEACHER HUB
GCSE Higher revision sheet - 3

1. Simplify

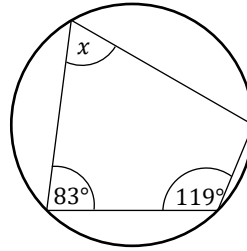
(a) $(5x^7)^2$

.....

(b) h^0

.....

2. Work out the size of angle of x .



.....

3. Simplify $\sqrt{50}$

.....

4. Make x the subject of the formula.

$$\sqrt{x + m} = t$$

.....

5. Hector cycled at a speed of 18kmph for 90 minutes.
How far did he travel?

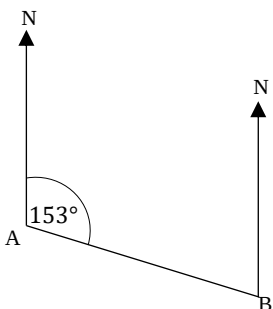
.....

6. Expand and simplify.

$$(2x + 1)(x - 5)$$

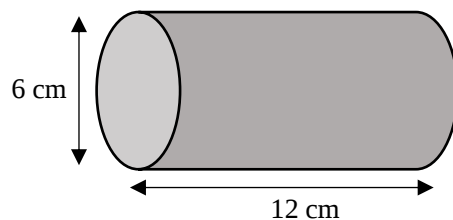
.....

7. Work out the bearing of A from B.



.....

8. Work out the volume of the cylinder. Leave your answer in terms of π



.....

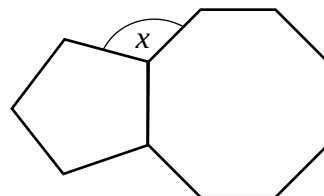
9. £1 = 1.14 Swiss francs
Convert
(a) £270 into Swiss francs

.....

- (b) 925 Swiss francs into pounds

.....

10. Below are two regular polygons.
Work out the value of x .



.....

11. Prove that the sum of 3 consecutive numbers is always a multiple of 3.

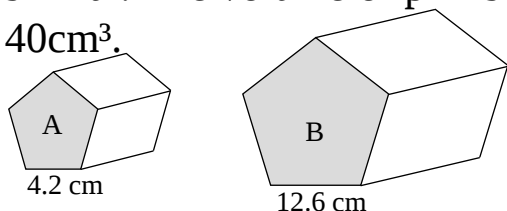
.....

12. The density of a house brick is 1.83 g/cm^3
Each brick has a volume of 1900 cm^3

Work out the mass of a house brick in Kg.

.....

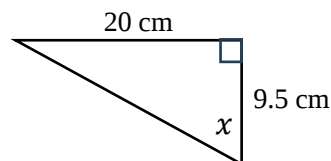
13. The two prisms are mathematically similar. The volume of prism A is 40 cm^3 .



Work out the volume of prism B.

.....

14. Work out the value of x .

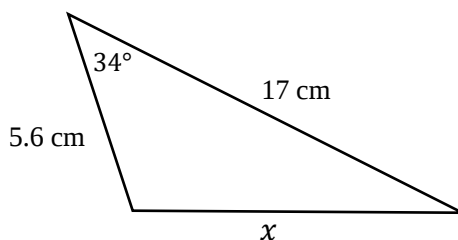


.....

15. Solve $3x^2 + 2x - 13 = 0$
Give your solutions correct to 1 decimal place.

.....

16. Work out the value of x .



.....