

# Number Properties Homework



No calculator!

## Literacy – Write a definition of these terms

**Prime number:**

**Square number:**

## Research

What is the 100<sup>th</sup> triangle number?

Find the formula for the triangle numbers.

## Memory

- Memorise "I ate and ate till I was sick on the floor" to remind you that  $8^2 = 64$ .
- For  $13^2$  and  $14^2$  just swap the last 2 digits.

## Skills

Do not use a calculator to work out:

a)  $5^2 + 3^2$

b)  $12^2 - 3^3$

c)  $5^3 + 2^3$

d)  $3^0 \times 4^3$

e)  $\sqrt{169}$

f)  $\sqrt{400}$

g)  $\frac{12^2}{6^2}$

h)  $\sqrt[3]{64}$

i)  $\sqrt[3]{1}$

j)  $\sqrt[3]{27}$

## Stretch

Find the value of:

a)  $\sqrt{16\ 900}$

b)  $\sqrt{40\ 000}$

c)  $\sqrt[3]{1000}$

d)  $\sqrt[4]{16}$