

The sum of the squares of the first  $n$  natural numbers is given as:

$$\sum_{i=1}^n i^2 = \frac{1}{6} \cdot n \cdot (n+1) \cdot (2 \cdot n + 1).$$

According to Pythagoras, the length of the hypotenuse  $c$  of a right triangle is the square root of the length of the two catheti  $a$  and  $b$ :

$$c = \sqrt{a^2 + b^2}.$$

The area  $A$  of a circle with radius  $r$  is given as

$$A = \pi \cdot r^2,$$

while its circumference  $C$  satisfies

$$C = 2 \cdot \pi \cdot r.$$