

Maths Worksheet

Class VI Algebra

1. Find the value of the following:

(a) 2^3

(b) $(-3)^2 \times 2^3$

(c) $(1/4)^2$

(d) $(-7)^3$

(e) $(-3/4)^2$

2. If $a = -1$, $b = 2$, find the values of the following:

(a) $a^2 + b^2$

(b) $2a + 2b$

(c) $a^3 - b^3$

(d) $a + 2ab - b$

(e) $-a^3 - b^3$

3. If $p = 1$, $q = 0$, $r = -1$, find the value of $p^3 - q^3 + 3pqr + r^3$

4. For $x = 1$, $y = 2$, verify the following:

(i) $x^2 + y^2 = (x + y)^2 - 2xy$

(ii) $(x - y)^2 = x^2 - 2xy + y^2$

5. Write the following in mathematical form using signs and symbols:

i. The side of a regular pentagon is 'a'. Find its Perimeter.

ii. If the side of an equilateral triangle is 's', then express the perimeter of the triangle in the terms of 's'.

iii. If the diameter of a circle is $4r$. Find its radius.

iv. Bharat is 10 years older than his brother Ram. If Ram is x years. What is Bharat's age 3 years from now?