

Sum and Product of the roots

Name _____

Score _____

RQ:09

Find the sum and product of the roots of each equation.

1)
$$x^2 - 10 = -6$$

Sum of the roots = _____

Product of the roots = _____

3)
$$5n^2 - 10n - 1 = 0$$

Sum of the roots = _____

Product of the roots = _____

2)
$$2u^2 + u = 0$$

Sum of the roots = _____

Product of the roots = _____

4)
$$t^2 + 8t - 9 = 0$$

Sum of the roots = _____

Product of the roots = _____

Complete the table.

| Q. No | Quadratic Equations | Sum of the roots | Product of the roots |
|-------|---------------------|------------------|----------------------|
| 1) | $6m^2 - 5m = 0$ | | |
| 2) | $y^2 + 49 = 0$ | | |
| 3) | $3p^2 + p - 4 = 0$ | | |
| 4) | $g^2 - g + 2 = 0$ | | |



Sum and Product of the roots

Answer key

RQ:09

Find the sum and product of the roots of each equation.

1)
$$x^2 - 10 = -6$$

Sum of the roots = _____0

Product of the roots = _____4

3)
$$5n^2 - 10n - 1 = 0$$

Sum of the roots = 2

Product of the roots = $\frac{-\frac{1}{5}}{5}$

2)
$$2u^2 + u = 0$$

Sum of the roots = $\frac{-\frac{1}{2}}{2}$

Product of the roots = _____

4)
$$t^2 + 8t - 9 = 0$$

Sum of the roots = ____8

Product of the roots = ____9

Complete the table.

| Q. No | Quadratic Equations | Sum of the roots | Product of the roots |
|-------|---------------------|------------------|----------------------|
| 1) | $6m^2 - 5m = 0$ | <u>5</u> 6 | 0 |
| 2) | $y^2 + 49 = 0$ | 0 | 49 |
| 3) | $3p^2 + p - 4 = 0$ | - 1 3 | $-\frac{4}{3}$ |
| 4) | $g^2 - g + 2 = 0$ | 1 | 2 |