

Algebraic Substitution – www.m4ths.com

Find the value of each expression given the values in each question:

- (1) $x^2 - 2x$ when $x = 4$
- (2) $10 - 4x$ when $x = -3$
- (3) $2x^2$ when $x = 7$
- (4) $(x + 1)(x - 3)$ when $x = 5$
- (5) $x(2x + 1)$ when $x = -3$
- (6) $5x^2 - x$ when $x = 3$
- (7) $(3x)^2 - 5x$ when $x = -2$
- (8) $xy - x$ when $x = 2$ and $y = 3$
- (9) x^2y when $x = -2$ and $y = 5$
- (10) $2xy^2$ when $x = 5$ and $y = 1$
- (11) $x(y - x)$ when $x = 6$ and $y = 3$
- (12) $-x^2$ when $x = 6$
- (13) $(-x)^2$ when $x = 6$

Find the value of y for the given value of x .

- (14) $y = 5x^2$ when $x = 4$
- (15) $y = x(x - 7)$ when $x = -2$
- (16) $y = 3x - x^2$ when $x = 2$
- (17) $y = (x + 2)^2$ when $x = -4$
- (18) $y = \frac{2x}{x-3}$ when $x = 7$
- (19) $y = x^3 + 4x + 1$ when $x = 4$
- (20) $y = 6 - 2x^2$ when $x = -4$
- (21) $y = (2 + x)(2 - x)$ when $x = 1$
- (22) $y = \sqrt{x} + x$ when $x = 4$
- (23)* $y^2 = 2x$ when $x = 8$
- (24)* $\sqrt{y} = 4x - 1$ when $x = 2$
- (25)* $xy = x^2 + 9$ when $x = 4$

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