



Holiday Assignments

English Junior Section

Mathematics 05 (Algebraic expressions) Grade 8 English Medium

(I) Simplify the algebraic expressions given below :

(a) $x + 2x + 3x$

(f) $3a + 2b - 2a - 3b + 5$

(b) $5m + 6n - 3n - 7m$

(g) $5x + 2y - 2x + 3y$

(c) $4x + 2y + x - 2x$

(h) $3p - q - 2p + 3q$

(d) $m + 3m - 2m$

(i) $7x + 3y - 2x - y$

(e) $4x - 8x + 6x$

(j) $2b - 5a + 7b - 2$

(II) Simplify the following :

(a) $3(x + 2)$

(i) $4(5 + 6x)$

(b) $4(10x - 5)$

(j) $7(7 - 4x)$

(c) $4(8x - 4y)$

(k) $-5(x + 6)$

(d) $-7(4 - 3x)$

(l) $-10(4m - 2n)$

(e) $8(-x + 4)$

(m) $-9(7 + 4a)$

(f) $3(4x + 2y + 6)$

(n) $4(3a - 2b - 4c)$

(g) $-2(7a - 2c + 3 - 5)$

(o) $-2(4a - 2b + c)$

(h) $2(2x + 3y + 8) + 5$

(p) $10(y + 2x - 4x)$

(III) Simplify :

(a) $(3a - 4b) + (5a + 6b) + (9a + 3b)$

(b) $(8x - 5y + z) - (x - 6y) - (x - 5y - 7z)$

(c) $(4p - 11q + 6) + (2p - 9q - 5)$

(d) $6x + 4(x + 2) - (3x + 5)$

(e) $2x(3x - 6) - 4(x - 3)$

(f) $(2y^2 + 3y + 2) - (y^2 - y + 4)$

(g) $10n(n + 2m) + 4n^2 - 2mn$

(h) $(4l + 3m - 2n) + (5l + 4m - 2n)$

(i) $8x - 4(x+4)$

(IV) If $x = 5$, $y = -4$, $z = 3$. Find the value of the below algebraic expressions

(a) $2x + 3y - z$

(e) $12x(x + y)$

(b) $-x(2y + 3z)$

(f) $(x + y)(x - z)$

(c) $xy + yz + 3z$

(g) $(2x + 3y)(4x - y + 8)$

(d) $xy + yz + xz$

(V) Find the perimeter of the below figure :

