

Order of Operations Worksheet 2
Evaluating Algebraic Expressions - Part 1

1. Evaluate each expression given: $a = 1$, $b = 2$, $x = 5$, $y = 10$

(a) $y - a$

(b) xy

(c) $x \div a + x$

(d) $y - b$

(e) $ab + y$

(f) $y \div a - bx$

(g) $x + y$

(h) $ax - b$

(i) $5a$

(j) $a + b$

(k) $bx - y$

(l) $5b$

(m) ab

(n) $xy + ab$

(o) $10y + y$

(p) ax

(q) $y \div b$

(r) $10b - a$

(s) bx

(t) $y \div x$

2. Evaluate each expression given: $a = 3$, $b = 5$, $x = 2$, $y = 4$

(a) $a \cdot 7$

(b) $5x - y$

(c) $a \cdot x + b \cdot y$

(d) $b \cdot 8$

(e) $2b - 2a$

(f) $2ab$

(g) $2 \cdot x + y$

(h) $6x \div y$

(i) $b + x \cdot a$

(j) $a + 6 \cdot b$

(k) $x + y \cdot 7 \div 2$

(l) $4x \div y$

3. Write the product:

(a) 5^3

(b) 4^2

(c) 10^3

(d) 9^2

4. Calculate each square root:

(a) $\sqrt{25}$

(b) $\sqrt{1}$

(c) $\sqrt{9}$

(d) $\sqrt{121}$

5. Evaluate, remembering to always use the order of operations:

(a) $2(6 - 3)^3$

(b) $16 - 2(5) + 8$

(c) $3 \cdot 4^2$

(d) $(3 \cdot 4)^2$

(e) $15 \div 3 \cdot 5$

(f) $37 - (2 + 4)^2$