

Algebraic Expressions and Identities: Worksheet -3

1. $A = x^2 - a - y^2$

$B = b - 3xy + 5y^2$

 $A - B = -x^2 + 2xy - 6y^2$, then what are the values of a & b? []

a] $a = xy, b = 2x^2$

b] $a = 2x^2, b = xy$

c] $a = x^2, b = xy$

d] $a = 0, b = 12$.

2. What should be subtracted from $1 + x - x^2$ to get $2x + x^2$? []

a] $1 - x - 2x^2$

b] $1 - x + 2x^2$

c] $2x^2 - x + 1$

d] Both (a) & (b)

3. $a(b - c) + b(c - a) + c(a - b) =$ []

a] abc

b] $a^b b^c c^a$

c] 0

d] 1

4. Add the following algebraic expressions:

i) $\frac{2}{3}a, \frac{3}{5}a, -\frac{6}{5}a$

ii) $4xy^2 - 7x^2y, 12x^2y - 6xy^2, -3x^2y + 5xy^2$

iii) $\frac{7}{2}x^3 - \frac{1}{2}x^2 + \frac{5}{3}, \frac{3}{2}x^3 + \frac{7}{4}x^2 - x + \frac{1}{3}, \frac{3}{2}x^2 - \frac{5}{2}x - 2$

