



Expressions and Equations

Algebra Review

- 1 Consider the expression $5x + 2y + 8$
 - a) How many terms are in the expression
 - b) What is the coefficient of y
 - c) What is the constant term
- 2 Write an algebraic expression for the following
 - a) 3 less than b
 - b) 4 more than twice k
 - c) the sum of x and y divided by 7
- 3 Evaluate these expressions if $a = 6$ $b = 3$ $c = -2$
 - a) $2a + b$
 - b) $4b - c$
 - c) $a^2 + 2b$
- 4 Simplify the following by collecting like terms
 - a) $8a + 3a$
 - b) $7m + 20 - 6m$
- 5 Simplify the following by collecting like terms
 - a) $7a + 3b + 3a + b$
 - b) $5ab + 2a + ab - 4a$
 - c) $4a^2 - 3ab + 2a^2 + 7ba$
- 6 Simplify the following
 - a) $5 \times 2b$
 - b) $-3a \times 6b$
- 7 Simplify the following
 - a) $\frac{5a}{10}$
 - b) $10ab \div 15a$
- 8 Expand the following
 - a) $5(a + 2)$
 - b) $3(b - 6)$
 - b) $2a(3a - 4)$
- 9 Expand the following and collect like terms
 - a) $3(a + 5) - 8$
 - b) $12 - 3(b - 2)$

Answers

Question 1

a) 3

b) 2

c) 8

Question 2

a) $b - 3$

b) $2k + 4$

c) $\frac{x+y}{7}$

Question 3

a) 15

b) 14

c) 42

Question 4

a) $11a$

b) $m + 20$

Question 5

a) $10a + 4b$

b) $6ab - 2a$

c) $6a^2 + 4ab$

Question 6

a) $10b$

b) $-18ab$

Question 7

a) $\frac{a}{2}$

b) $\frac{2b}{3}$

Question 8 Expand the following

a) $5a + 10$

b) $3b - 18$

b) $6a^2 - 8a$

Question 9

a) $3a + 7$

b) $18 - 3b$