MATH

Term 2 Practice

SEC 1 MATH

Answer **all** the questions.

1. Simplify the following.
   a) $9 \times (-x)$
   b) $b \times b \times 5$
   c) $5x \times (-3y)$

2. Simplify the following algebraic expression:
   a) $12y + 3y - 9y$
   b) $3b - 2b - 8b + 3$
   c) $4x + 3y - 2x - y$
   d) $-3x + 5y + 4x - y$
   e) $a - 5b - 2 + 6a + 3b - 9$

3. Expand and simplify the following:
   a) $3(2x + y) + 6(4x + y)$
   b) $-3(2x - 5y) + 2(4y - 3x)$
   c) $4(3x + y) - 6(2x + 7y)$
   d) $5a(2x + 3y) - 3a(3x + 2y)$
   e) $4p(q - 9r) - q(3r - p)$

4. Simplify the following:
   a) $\dfrac{2p+q}{8} - \dfrac{2p+5q}{16}$
   b) $\dfrac{4b-3c}{7} - \dfrac{3c-2b}{2}$
   c) $\dfrac{z+7x}{3} - \dfrac{2x-3z}{5}$
   d) $\dfrac{1}{3}(3p + 2q) - \dfrac{1}{2}(q - 2p)$

5. Solve the following equations.
   a) $4x + 7 = 11$
   b) $2 + \frac{2}{5}z = 8$

6. Solve the following equations.
   a) $9r + 2 = 5 - 6r$
   b) $8 + 2p = 5 - 2p$
   c) $\frac{x}{2} + x = 6$