

Combining Expressions 1 - KEY

Simplify the following expressions completely

1) $8x + 3x = 11x$

9) $\frac{2xy^2z}{6x^3yz} = \frac{y}{3x^2}$

2) $3x^2 \cdot 4x^3 = 12x^5$

10) $x^2 + 3x^2 = 4x^2$

3) $\frac{x^5}{x^3} = x^2$

11) $4x^2 \cdot 3x^3 \cdot 2x^2 = 24x^7$

4) $5x^3 + x^3 = 6x^3$

5) $4x^2 - 3x^3 + 2x^2 = -3x^3 + 6x^2$

12) $(3x^4yz^2)^2 = 9x^8y^2z^4$

6) $(2xy^3z^2)(4xyz^3) = 8x^2y^4z^5$

13) $(-2xy^3)^3 = -8x^3y^9$

7) $4x^2 - 2x + x^2 - x + 4$
 $= 5x^2 - 3x + 4$

14) $(xy^2)^3(2x^3y^4)^2 = 4x^9y^{14}$

8) $(x^3)^2 = x^6$

15) $(2xy)(3x^3y) = 6x^4y^2$