Quiz 32.1

Solve each equation by completing the square.

1) $x^2 + 10x + 14 = 5$

A) $\{11, 9\}$ B) $\{2, -4\}$
C) $\{-1, -9\}$ D) No solution.

2) $n^2 + 2n - 62 = -6$

A) $\{-1 + \sqrt{57}, -1 - \sqrt{57}\}$
B) $\{-7 + \sqrt{95}, -7 - \sqrt{95}\}$
C) $\{-14 + 5\sqrt{6}, -14 - 5\sqrt{6}\}$
D) $\{-7 + \sqrt{3}, -7 - \sqrt{3}\}$

Simplify. Your answer should contain only positive exponents.

3) $x^{-2}y^{-1} \cdot 3x^4$

A) $\frac{3x^2}{y}$ B) $8x^2$
C) $2y^2x^2$ D) $\frac{3}{y^4}$

4) $a^0b^3 \cdot \left(b^{-3}\right)^{-4}$

A) $64a^{12}b^{11}$ B) b^{15}
C) b^4a^{14} D) $4a^4b^4$