Algebra 1 Review

Solve the equations.

- $-156 = -6(2 + 4x)$

- $5(1 + 8x) + 3x = -296$

Solve for the indicated variable.

- $xm = n - p \ \ , for\ x$

- $\frac{c}{x} = r - d \ \ \ , for\ x$

Solve the following inequalities.

- $11 < 5x + 6 < 16$
- $-9 \leq 6 - 5b < 46$

Write the equation in slope intercept form of the line passing through the following points.

- Through (-3,1) and (0,-1)

- Through (2,-4) and (-5,3)

Simplify. Your answer should only contain positive exponents.

- $\dfrac{a^2b^3 \cdot 4ba^3}{4b^4}$

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

Factor completely.

- $-12x^2y - 12y + 6$

- $-12m^2n^3 + 32mn^4 - 16mn^3$

Factor completely.

- $n^2 + 16n + 63$

- $x^2 + 13x + 42$

Solve by factoring.

- $3x^2 + 24x + 45 = 0$

- $3x^2 + 9x = 0$

- Gabriella and Wilbur are selling pies for a school fundraiser. Customers can buy blueberry pies and blackberry pies. Gabriella sold 3 blueberry pies and 10 blackberry pies for a total of $213. Wilbur sold 11 blueberry pies and 5 blackberry pies for a total of $211. What is the cost each of one blueberry pie and one blackberry pie?