

Name: _____

Date: _____

Assignment

1. Convert to Standard Form

$$y = ax^2 + bx + c$$

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|----|-----------------------|----|------------------------|----|-----------------------|
| a. | $y = 14x + x^2 - 5$ | b. | $y = 8 - 3x - x^2$ | c. | $y = x^2 - 5 + 3x$ |
| d. | $y = (x - 4)(2x + 1)$ | e. | $y = (3x + 1)(9x + 1)$ | f. | $y = (x + 5)(x + 2)$ |
| g. | $y = (x + 5)(2x - 1)$ | h. | $y = (x - 4)(x - 3)$ | i. | $y = (x - 6)(x + 7)$ |
| j. | $y = 3x(x - 6) + 11$ | k. | $y = x(2x + 5) - 8$ | l. | $y = 4(x + 6) + 4x^2$ |
| m. | $y = (x - 2)^2 + 2$ | n. | $y = (x + 4)^2 - 1$ | o. | $y = 2(x - 1)^2 + 1$ |

p. Convert to Factored Form

$$y = (x - m)(x - n)$$

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|----|----------------------|----|----------------------|----|----------------------|
| a. | $y = x^2 + 8x + 12$ | b. | $y = x^2 - 11x + 24$ | c. | $y = x^2 - 6x - 7$ |
| d. | $y = x^2 - 4x - 32$ | e. | $y = x^2 + 5x - 6$ | f. | $y = x^2 + x - 2$ |
| g. | $y = x^2 + 6x - 16$ | h. | $y = x^2 - 3x - 40$ | i. | $y = x^2 + 11x + 24$ |
| j. | $y = 5x^2 - 13x - 6$ | k. | $y = 6x^2 + 13x + 6$ | l. | $y = 3x^2 + 7x - 6$ |