Name

Quadratic Equation Complete Square - To Partially Complete (Coefficient N)

1 Complete the square to be ready to factor this polynomial

$$y = 4x^2 + 16x + 17$$

A $y = 4(x^2 + 4x + 4) + 16 + 17$
B $y = 4(x^2 + 4x + 4) + 18 + 17$
C $y = 4(x^2 + 4x + 8) - 16 + 17$
D $y = 4(x^2 + 4x + 4) - 21 + 17$
E $y = 4(x^2 + 4x + 4) - 16 + 17$

2 Complete the square to be ready to factor this polynomial

$$y = 4x^2 - 8x + 5$$

A $y = 4(x^2 - 2x + 5) - 4 + 5$
B $y = 4(x^2 - 2x + 1) - 1 + 5$
C $y = 4(x^2 - 2x - 2) - 4 + 5$
D $y = 4(x^2 - 2x + 1) - 4 + 5$
E $y = 4(x^2 - 2x + 1) + 4 + 5$

3 Complete the square to be ready to factor this polynomial

$$y = 5x^2 - 30x + 46$$

A $y = 5(x^2 - 6x + 9) - 45 + 46$
B $y = 5(x^2 - 6x + 9) - 44 + 46$
C $y = 5(x^2 - 6x + 9) + 45 + 46$
D $y = 5(x^2 - 10x + 9) - 45 + 46$
E $y = 5(x^2 - 6x + 9) - 40 + 46$

4 Complete the square to be ready to factor this polynomial

$$y = 2x^2 + 16x + 31$$

A $y = 2(x^2 + 8x + 20) - 32 + 31$
B $y = 2(x^2 + 8x + 16) + 32 + 31$
C $y = 2(x^2 + 8x + 21) - 32 + 31$
D $y = 2(x^2 + 8x + 16) - 32 + 31$
E $y = 2(x^2 + 8x + 15) - 32 + 31$

5 Complete the square to be ready to factor this polynomial

$$y = 3x^2 - 24x + 47$$

A $y = 3(x^2 - 8x + 16) - 46 + 47$
B $y = 3(x^2 - 9x + 16) - 48 + 47$
C $y = 3(x^2 - 5x + 16) - 48 + 47$
D $y = 3(x^2 - 8x + 16) - 53 + 47$
E $y = 3(x^2 - 8x + 16) - 48 + 47$

6 Complete the square to be ready to factor this polynomial

$$y = 4x^2 + 8x + 2$$

A $y = 4(x^2 + 2x - 0) - 4 + 2$
B $y = 4(x^2 + 2x + 5) - 4 + 2$
C $y = 4(x^2 + 2x + 1) - 4 + 2$
D $y = 4(x^2 + 2x + 1) + 4 + 2$
E $y = 4(x^2 + 2x + 6) - 4 + 2$

7 Complete the square to be ready to factor this polynomial

$$y = 2x^2 - 4x + 6$$

A $y = 2(x^2 - 2x + 1) + 2 + 6$
B $y = 2(x^2 - 2x + 1) + 7 + 6$
C $y = 2(x^2 - 2x + 1) - 2 + 6$
D $y = 2(x^2 - 2x - 3) - 2 + 6$
E $y = 2(x^2 - 7x + 1) - 2 + 6$

8 Complete the square to be ready to factor this polynomial

$$y = 5x^2 - 40x + 84$$

A $y = 5(x^2 - 8x + 16) - 83 + 84$
B $y = 5(x^2 - 8x + 16) - 80 + 84$
C $y = 5(x^2 - 8x + 16) + 80 + 84$
D $y = 5(x^2 - 8x + 16) + 82 + 84$
E $y = 5(x^2 - 8x + 17) - 80 + 84$