Bellwork Alg 2A Friday, March 24, 2017

Fill in the blanks to complete the square.

1. $x^2 - 12x$_____ $= (x \quad)^2$

2. $x^2 + 11x$_____ $= (x$_____$)^2$

Solve each by Completing the Square.

3. $x^2 + 26x \quad = 9$

4. $x^2 + 14x + 121 = 0$

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Fill in the blanks to complete the square.

1. $x^2 - 12x$ $+36$ $= (x \ -6 \ )^2$ — 2nd $(b/2)^2$; 1st $\frac{b}{2}$

2. $x^2 + 11x$ $+ \frac{121}{4}$ $= (x \ + \frac{11}{2} \ )^2$ — 2nd $(b/2)^2$; 1st $\frac{b}{2}$

Solve each by Completing the Square.

3. $x^2 + 26x \ +169 \ = 9 \ +169$

1st $b/2$; 2nd $(b/2)^2$

$(x+13)^2 = 178$

$x + 13 = \pm\sqrt{178}$

$-13 \quad -13$

$x = -13 \pm \sqrt{178}$

4. $x^2 + 14x + 121 = 0$

$-121 \quad -121$

$x^2 + 14x \ +49 \ = -121 \ +49$

1st, 2nd

$(x+7)^2 = -72 \rightarrow -36 \cdot 2$

$x + 7 = \pm 6i\sqrt{2}$

$-7 \quad -7$

$x = -7 \pm 6i\sqrt{2}$