Chapter 10.5 Completing the Square

This method always works on solving quadratics.

Rules:
1. write the equation is $ax^2 + bx = c$
2. take $\left(\frac{b}{2}\right)^2$, then add it to both sides of the equation. if $a \neq 1$ divide each term by a.
3. Factor the left hand side of the equation
4. take the square root of both sides
5. rewrite as two equations and solve.

Apr 4-10:17 AM

Ex1a) $x^2 - 6x = 247$

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Ex1b) $x^2 - 20x + 32 = 0$

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Ex2a) $x^2 + 5x = 50$

Ex2b) $x^2 + 5x + 3 = 0$

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Ex3a) $2x^2 + 8x - 10 = 0$

Ex3b) $4x^2 = -2x + 12$

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Try 1. $x^2 - 8x - 4 = 0$

Try 2. $2x^2 - 16x = -30$

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