

Warm up!

Given the equation, list all the methods you could use to solve the equation. (Some methods will not work for every equation.)
DO NOT SOLVE.

1. $x^2 + 81 = 0$ Square root, quad. Form
 $x^2 + 0x + 81 = 0$
2. $x^2 + 16x + 64 = 0$ Factoring, graphing, Quad. Form
3. $2x^2 + 10x + 24 = 0$ quad. form
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Describe what you look for in determining which method is best to solve a quadratic equation:

- a) Square Root: look for equation $a(x-h)^2+k=0$ OR $x^2 \pm k=0$
- b) Factoring:
 - ① Find discriminant
 - ② $\text{disc} = \text{perf. sq. \# OR zero}$
- c) Graphing:
 Same as Factoring OR
 when we have a word prob., $\text{DISC}=\text{positive}$
- d) Quadratic Formula:
 - ① Find disc.
 - ② $\text{disc} = \text{neg}$
 $\text{disc} = \text{pos. \# that is not a perf. sq.}$