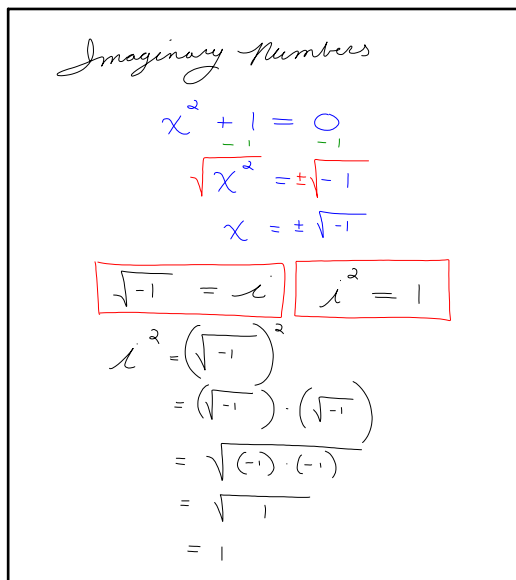
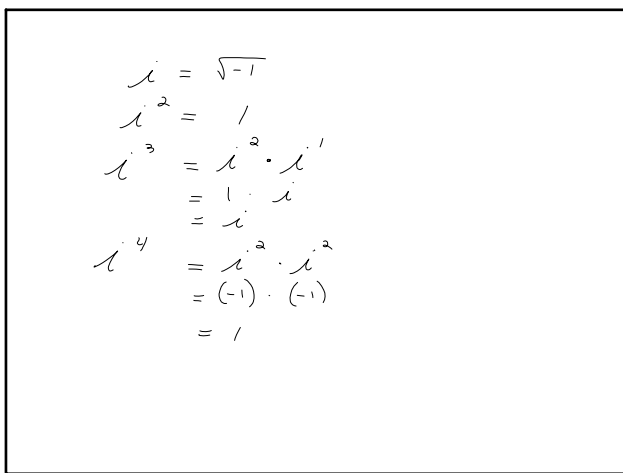


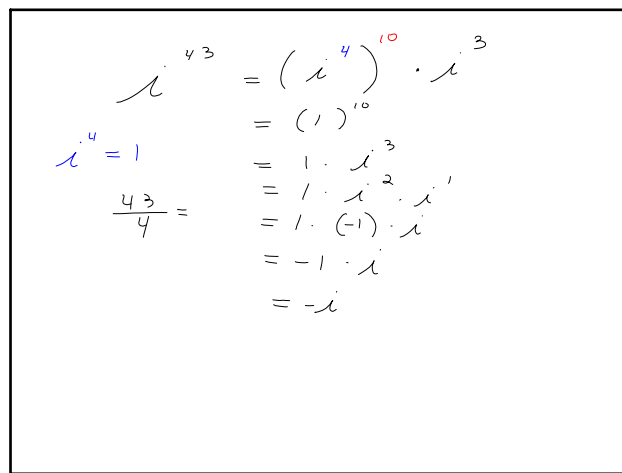
Jan 20-11:04 AM



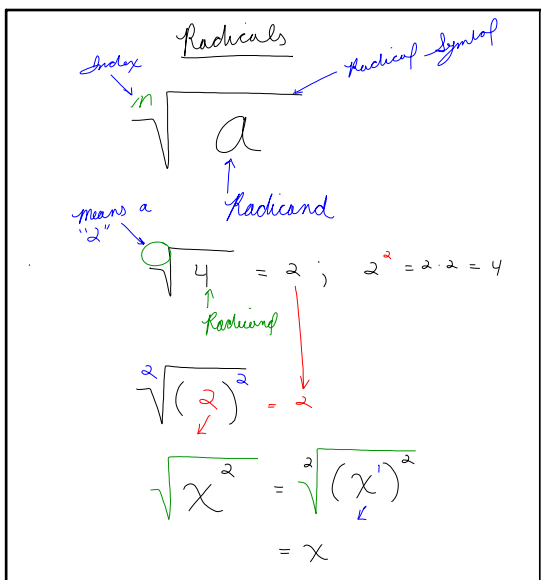
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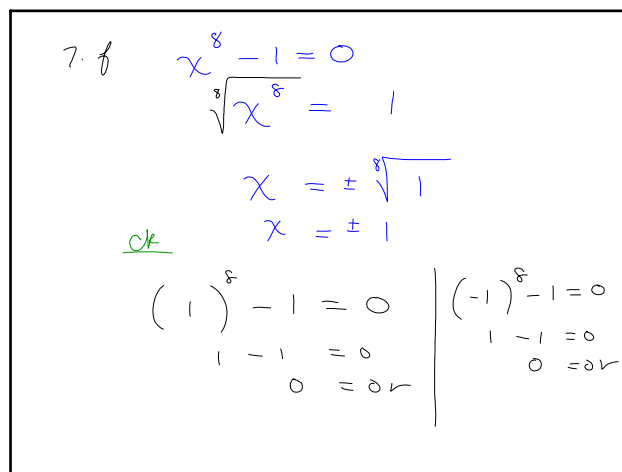
Jan 20-11:24 AM



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Jan 20-11:12 AM



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Completing the Square

$$\textcircled{1} x^2 - 6x + 1 = 0$$

① $x^2 - 6x = -1$

a. $= \frac{6}{1} \cdot \frac{1}{2} = \frac{-6}{2} = \textcircled{-3}$

b. $(-3)^2 = 9 \leftarrow \text{add to both sides of the equation}$

② $x^2 - 6x + 9 = -1 + 9$
Perfect Square Trinomial

③ $\sqrt{(x-3)^2} = \pm\sqrt{8}$
 $x-3 = \pm\sqrt{4 \cdot 2} = \pm\sqrt{4} \cdot \sqrt{2}$
 $x-3 = \pm 2\sqrt{2}$
 $x = 3 \pm 2\sqrt{2}$

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$$x = 3 \pm 2\sqrt{2}$$

$$x^2 - 6x + 1 = 0$$

$$(3 + 2\sqrt{2})^2 - 6(3 + 2\sqrt{2}) + 1 = 0$$

$$(3 + 2\sqrt{2})(3 + 2\sqrt{2}) - 18 - 12\sqrt{2} + 1 = 0$$

$$9 + 6\sqrt{2} + 6\sqrt{2} + 8 - 18 - 12\sqrt{2} + 1 = 0$$

$$17 + 12\sqrt{2} - 18 - 12\sqrt{2} + 1 = 0$$

$$17 - 18 + 1 = 0$$

$$-1 + 1 = 0$$

$$0 = 0 \checkmark$$

Jan 20-11:45 AM