

Extra Practice for Chapter 4:

Complete **without** the use of a calculator.

1. Solve by completing the square.

$$2x^2 - 12x + 5 = 0$$

2. Solve by zero-product property.

$$3x^2 = 4 - 4x$$

3. Solve by the quadratic formula:

$$(x - 3)^2 = 4$$

4. Factor $8y^3 + 125x^3$

5. Solve $x^2 = 2x - 5$

6. Solve and graph on a number line

$$x^2 - x - 6 \leq 0$$

7. Simplify $\frac{5 - 3i}{2 + 4i}$

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Answers:

1. $x = 3 \pm \frac{\sqrt{26}}{2}$

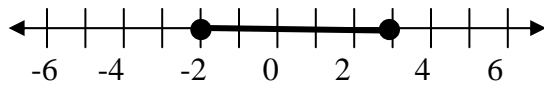
2. $x = -2$ or $\frac{2}{3}$

3. $x = 5$ or 1

4. $(2y + 5x)(4y^2 - 10xy + 25x^2)$

5. $x = 1 \pm 2i$

6. $-2 \leq x \leq 3$



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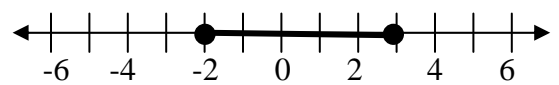
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