### Lesson 10 Practice Problems

1. Select **all** the true statements.
	1. $\sqrt{-1}$ is an imaginary number.
	2. There are no real numbers that satisfy the equation $x=\sqrt{-1}$.
	3. Because $\sqrt{-1}$ is imaginary, no one does math with it.
	4. The equation $x^{2}=-1$ has real solutions.
	5. $\sqrt{-1}=-1$ because $-1⋅-1=-1$.
2. Plot each number on the real number line, or explain why the number is not on the real number line.
	1. $\sqrt{4}$
	2. $-\sqrt{4}$
	3. $\sqrt{-4}$
	4. $\sqrt{8}$
	5. $-\sqrt{8}$
	6. $\sqrt{-8}$
* 
1. Explain why $\left(x−4\right)^{2}=-9$ has no real solutions.
2. Which value is closest to $10^{-\frac{1}{2}}$?
	1. -5
	2. $\frac{1}{5}$
	3. $\frac{1}{3}$
	4. 3
* (From Unit 3, Lesson 5.)
1. Which is a solution to the equation $\sqrt{6−x}+5=10$?
	1. -19
	2. 19
	3. 21
	4. The equation has no solutions.
* (From Unit 3, Lesson 7.)
1. Select **all** equations for which -64 is a solution.
	1. $\sqrt{x}=8$
	2. $\sqrt{x}=-8$
	3. $\sqrt[3]{x}=4$
	4. $\sqrt[3]{x}=-4$
	5. $-\sqrt{x}=8$
	6. $\sqrt{-x}=8$
* (From Unit 3, Lesson 8.)



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