

Unit 8 Lesson 5: Reasoning About Square Roots

1 True or False: Squared (Warm up)

Student Task Statement

Decide if each statement is true or false.

$$(\sqrt{5})^2 = 5$$

$$(\sqrt{10})^2 = 100$$

$$(\sqrt{9})^2 = 3$$

$$(\sqrt{16}) = 2^2$$

$$7 = (\sqrt{7})^2$$

2 Square Root Values

Student Task Statement

What two whole numbers does each square root lie between? Be prepared to explain your reasoning.

1. $\sqrt{7}$

2. $\sqrt{23}$

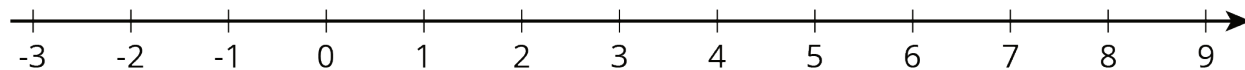
3. $\sqrt{50}$

4. $\sqrt{98}$

3 Solutions on a Number Line

Student Task Statement

The numbers x , y , and z are positive, and $x^2 = 3$, $y^2 = 16$, and $z^2 = 30$.



1. Plot x , y , and z on the number line. Be prepared to share your reasoning with the class.
2. Plot $-\sqrt{2}$ on the number line.