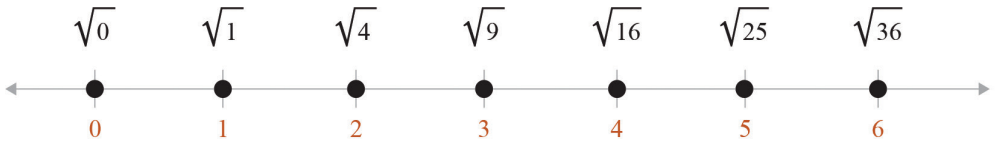
Square Roots

Fill in the guided notes as you watch the video in the Digital Toolbox.

- The **square root** of a number is the opposite, or inverse, of the square of a number.



- Starting with **zero**, perfect squares can be graphed on a number line.
- To find the square root of a **perfect square**, ask yourself, "What number multiplied by itself results in the given value?"

Example 1

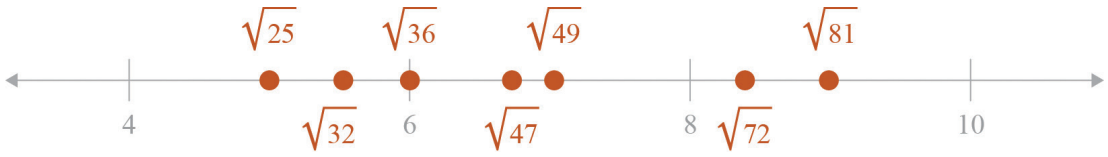
Complete the example as you watch the video in the Digital Toolbox.

A) Circle the perfect squares in the list of numbers.

(25), 32, (36), 47, (49), 72, (81)

B) Estimate the following numbers on a number line. Label each closed point.

$\sqrt{25}$, $\sqrt{32}$, $\sqrt{36}$, $\sqrt{47}$, $\sqrt{49}$, $\sqrt{72}$, $\sqrt{81}$



Example 2

Complete the example as you watch the video in the Digital Toolbox.

Simplify. If the number is not a perfect square, write "not a perfect square."

A) $\sqrt{121}$ 11

B) $-\sqrt{81}$ −9

C) $\sqrt{10}$ not a perfect square

Practice

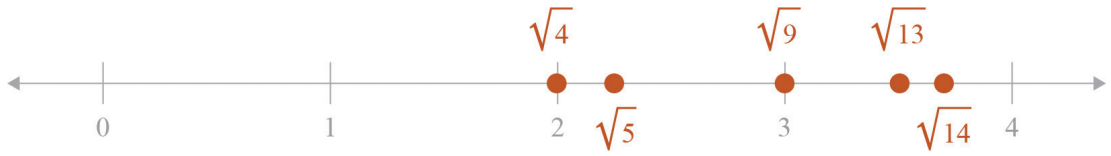
Complete the problems. Show your work.

1) Circle the perfect squares in the list of numbers.

(4), 5, (9), 13, 14

2) Estimate the following numbers on a number line. Label each closed point.

$\sqrt{4}$, $\sqrt{5}$, $\sqrt{9}$, $\sqrt{13}$, $\sqrt{14}$

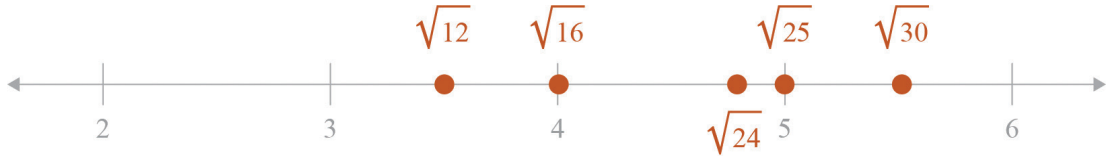


3) Circle the perfect squares in the list of numbers.

12, (16), 24, (25), 30

4) Estimate the following numbers on a number line. Label each closed point.

$\sqrt{12}$, $\sqrt{16}$, $\sqrt{24}$, $\sqrt{25}$, $\sqrt{30}$



Simplify. If the number is not a perfect square, write, "not a perfect square."

5) $\sqrt{81}$ 9

6) $-\sqrt{1}$ −1

7) $\sqrt{30}$ not a perfect square

8) $-\sqrt{144}$ −12

9) $-\sqrt{49}$ −7

10) $\sqrt{0}$ 0