

# Activity 1 Assessment

## Investigating Perfect Squares and Square Roots

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Uses exponential notation to show factors of a number

$$25 = 5 \times 5$$

$$= 5^2$$

Identifies a perfect square and a non-perfect square

$$64 = 8 \times 8$$

$$= 8^2$$

64 is a perfect square because it can be written as the product of two equal integers factors

$$63 = 3 \times 3 \times 7$$

$$= 3^2 \times 7$$

63 is not a perfect square because it cannot be written as the product of two equal integer factors. There is a single prime factor of 7 leftover

Determines the square root of a perfect square

$$144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$$

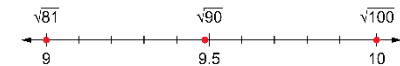
$$= 2 \times 2 \times 3 \times 2 \times 2 \times 3$$

$$= 12 \times 12$$

$$\sqrt{144} = 12$$

Estimates the square root of a non-perfect square

I know that  $\sqrt{81} = 9$  and  $\sqrt{100} = 10$ , so I estimate that  $\sqrt{90}$  is approximately 9.5 because 90 is about halfway between 81 and 100.



### Observations/Documentation