

Review Exercise Set 20

Exercise 1: Simplify.

$$\sqrt{49}$$

Exercise 2: Simplify.

$$-\sqrt{16}$$

Exercise 3: Simplify.

$$\sqrt{9} + \sqrt{16}$$

Exercise 4: Simplify.

$$-3\sqrt{144} + 50$$

Exercise 5: Between what two numbers is the value of $\sqrt{34}$.

Exercise 6: Between what two numbers is the value of $\sqrt{110}$.

Review Exercise Set 20

Exercise 1: Simplify.

$$\sqrt{49} = \sqrt{7^2} = 7$$

Since 49 is equal to 7^2 , the square root of 49 would be equal to 7.

Exercise 2: Simplify.

$$-\sqrt{16} = -\sqrt{4^2} = -4$$

Exercise 3: Simplify.

$$\begin{aligned}\sqrt{9} + \sqrt{16} &= \sqrt{3^2} + \sqrt{4^2} \\ &= 3 + 4 \\ &= 7\end{aligned}$$

Exercise 4: Simplify.

$$\begin{aligned}-3\sqrt{144} + 50 &= -3\sqrt{12^2} + 50 \\ &= -3(12) + 50 \\ &= -36 + 50 \\ &= 14\end{aligned}$$

Exercise 5: Between what two numbers is the value of $\sqrt{34}$.

$$\begin{aligned}\sqrt{25} &< \sqrt{34} < \sqrt{36} \\ \sqrt{5^2} &< \sqrt{34} < \sqrt{6^2} \\ 5 &< \sqrt{34} < 6\end{aligned}$$

25 and 36 are the two perfect squares closest to 34 so the square root of 34 must be between the square root of 25 and the square root of 36. Simplifying the equation shows that the square root of 34 is between 5 and 6.

Exercise 6: Between what two numbers is the value of $\sqrt{110}$.

$$\sqrt{100} < \sqrt{110} < \sqrt{121}$$

$$\sqrt{10^2} < \sqrt{110} < \sqrt{11^2}$$

$$10 < \sqrt{110} < 11$$

Since the $\sqrt{110}$ is between the $\sqrt{100}$ and $\sqrt{121}$ its value must be between **10 and 11**.