

Simplifying Radical Expressions Homework Day Three

$$1. \sqrt{108} \\ = 6\sqrt{3}$$

$$2. 5\sqrt{54} \\ = 15\sqrt{6}$$

$$3. 3\sqrt{18} + 2\sqrt{50} \\ = 19\sqrt{2}$$

$$4. 4\sqrt{12} + 3\sqrt{3} \\ = 11\sqrt{3}$$

$$5. \text{Simplify the root then estimate it. } 3\sqrt{175} \\ = 15\sqrt{27} \quad \approx 39.7$$

$$6. \text{Simplify the root then estimate it. } 3\sqrt{30} + 2\sqrt{120} \\ = 7\sqrt{30} \quad \approx 38.3$$

7. The bottom of a ladder must be placed 6 feet from a wall. The ladder is 8 feet long. How far above the ground does the ladder touch the wall? Give your answer in simplest radical form and estimate the root.

$$= 2\sqrt{7} \text{ feet} \quad \approx 5.3 \text{ feet}$$

Simplifying Radical Expressions Homework Day Three

$$1. \sqrt{108}$$

$$2. 5\sqrt{54}$$

$$3. 3\sqrt{18} + 2\sqrt{50}$$

$$4. 4\sqrt{12} + 3\sqrt{3}$$

$$5. \text{Simplify the root then estimate it. } 3\sqrt{175}$$

$$6. \text{Simplify the root then estimate it. } 3\sqrt{30} + 2\sqrt{120}$$

7. The bottom of a ladder must be placed 6 feet from a wall. The ladder is 8 feet long. How far above the ground does the ladder touch the wall? Give your answer in simplest radical form and estimate the root.