

## CHAPTER 9

### Lesson 9.2 (pp. 477–480)

Hints and Homework Help for Exs. 5, 9, 13, 27, 67

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5. The number  $0.\overline{2}$  is rational because it is a repeating decimal.
9. The number  $\sqrt{5}$  is irrational because its decimal form, 2.23606 . . . , is a nonterminating and nonrepeating decimal.
13. The number  $\sqrt{\frac{100}{81}}$  is rational because  $\sqrt{\frac{100}{81}} = \frac{10}{9}$  and  $\frac{10}{9}$  is the quotient of two integers.
27. Using mental math,  $-\sqrt{25} = -5$ .  
Because  $-5 = -5$ ,  $-5 = -\sqrt{25}$ .
67. Hint:
- Step 1** Find the length of the side of a square with an area of 20.25 square inches.
- Step 2** Convert the height of the wall into inches.
- Step 3** Divide your answer in Step 2 by your answer in Step 1.