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## Irrational Square Roots

### Practice – Answer Key

Directions: Approximate the solution for each equation given the irrational numbers.

1.  $a: a = 3\pi \approx \mathbf{9.42}$

2.  $x: x = 8\pi \approx \mathbf{25.12}$

3.  $b: b = 9\pi \approx \mathbf{28.26}$

4.  $c: c = 12\pi \approx \mathbf{37.68}$

5.  $a: a = 2\pi \approx \mathbf{6.28}$

6.  $y: y = 6\pi \approx \mathbf{18.84}$

7.  $b: b = 7\pi \approx \mathbf{21.98}$

8.  $d: d = 12\pi - 6 \approx \mathbf{31.68}$

9.  $a: a = 14\pi - 9 \approx \mathbf{34.96}$

10.  $x: x = 11\pi - 5 \approx \mathbf{29.54}$

11.  $\sqrt{2} + 5 = x \approx \mathbf{6.41}$

12.  $8 = \sqrt{2} + x \approx \mathbf{6.59}$

13.  $t = \pi - 5.3 \approx \mathbf{-2.16}$

14.  $\sqrt{h} = \sqrt{6} - \frac{3}{4} \approx \mathbf{2.89}$

15. Mrs. DeFazio wrote the following equation on the board.  $w = \sqrt{11} - 2^2$  What is the value of  $w$  in Mrs. DeFazio's equation?  $\approx \mathbf{-0.68}$