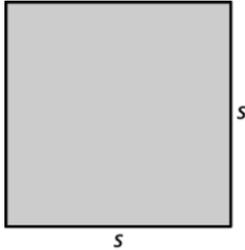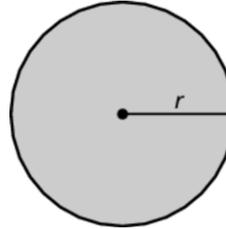Name_____ Date _____

7.1 Practice A

Find the dimensions of the square or circle. Check your answer.

1. Area $= 196$ in.^{2}

2. Area $= 36\pi$ m^2

Find the two square roots of the number.

3. 16

4. 0

Find the square root(s).

5. $\sqrt{121}$

6. $-\sqrt{\dfrac{1}{36}}$

7. $\pm\sqrt{\dfrac{289}{49}}$

8. $-\sqrt{0.64}$

Evaluate the expression.

9. $2\sqrt{25} + 3$

10. $7 - 12\sqrt{\dfrac{1}{9}}$

Copy and complete the statement with $<$, $>$, or $=$.

11. $\sqrt{64}$ __?__ 5

12. 0.6 __?__ $\sqrt{0.49}$

13. The volume of a right circular cylinder is represented by $V = \pi r^2 h$, where r is the radius of the base (in feet). What is the radius of a right circular cylinder when the volume is 144π cubic feet and the height is 9 feet?

14. The cost C (in dollars) of producing x widgets is represented by $C = 4.5x^2$. How many widgets are produced if the cost is $544.50?

15. Two squares are drawn. The larger square has area of 400 square inches. The areas of the two squares have a ratio of $1 : 4$. What is the side length s of the smaller square?
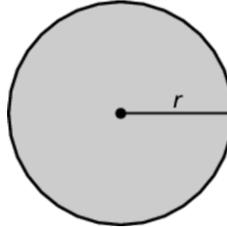
7.1 Practice B

Find the dimensions of the square or circle. Check your answer.

1. Area $= \dfrac{169}{225}$ cm^2
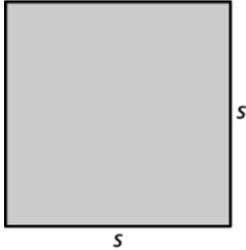
2. Area $= 121\pi$ yd^2

Find the two square roots of the number.

3. 225

4. 400

Find the square root(s).

5. $-\sqrt{484}$

6. $\pm\sqrt{\dfrac{25}{64}}$

7. $\sqrt{6.25}$

8. $\pm\sqrt{1.69}$

Evaluate the expression.

9. $6\sqrt{2.25} - 4.2$

10. $3\left(\sqrt{\dfrac{48}{3}} - 2\right)$

Copy and complete the statement with $<$, $>$, or $=$.

11. $\sqrt{\dfrac{49}{9}}$ ___?___ 2

12. $\dfrac{2}{5}$ ___?___ $\sqrt{\dfrac{12}{75}}$

13. The area of a sector of a circle is represented by $A = \dfrac{5}{18}\pi r^2$, where r is the radius of the circle (in meters). What is the radius when the area is 40π square meters?

14. Two squares are drawn. The smaller square has an area of 256 square meters. The areas of the two squares have a ratio of 4 : 9. What is the side length s of the larger square?