Practice 17.6

Name\_\_\_\_\_

Solve the equation symbolically.

1) 
$$\sqrt{y} = 4$$

2) 
$$\sqrt[3]{x-5} = 5$$

Evaluate the root function at the given x-value. Round to the nearest hundredth when appropriate.

3) 
$$f(x) = \sqrt{4x + 16}, x = 0$$

4) 
$$f(x) = \sqrt{(x - 1)^2}, x = 5$$

Solve the equation.

5)  $2x^2 = 8$ 

- 6)  $(16 8x)^2 = 1600$
- 7)  $(16 40x)^3 = -1000$

Solve the formula for the indicated variable.

8) 
$$r = \sqrt{\frac{S}{4\pi}}$$
 for S

9) 
$$L = \sqrt{\frac{2W}{k}}$$
 for k

Find the exact perimeter. Then approximate your answer to the nearest tenth.



Answer Key Testname: WKS\_17.6

> 1) 16 2) 130 3) 4 4) 4 5)  $\pm 2$ 6) -3, 7 7)  $\frac{13}{20}$ 8) S =  $4\pi r^2$ 9) K =  $\frac{2W}{L^2}$ 10)  $26\sqrt{6}$ , 63.7