Name $\qquad$

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) $f(x)=\sqrt{4 x+16}, x=0$
4) $f(x)=\sqrt{(x-1)^{2}}, x=5$

Solve the equation.
5) $2 x^{2}=8$
6) $(16-8 x)^{2}=1600$
7) $(16-40 \mathrm{x})^{3}=-1000$

Solve the formula for the indicated variable.
8) $r=\sqrt{\frac{S}{4 \pi}}$ for $S$
9) $L=\sqrt{\frac{2 W}{k}}$ for $k$

Find the exact perimeter. Then approximate your answer to the nearest tenth.
10)


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) $k=\frac{2 W}{L^{2}}$
10) $26 \sqrt{6}, 63.7$
