Name: $\qquad$
Date: $\qquad$

## Estimating Square Roots Assignment

1) Use benchmarks to estimate the following. Show your work.
a) $\sqrt{7}$
b) $\sqrt{ } 14$
c) $\sqrt{39}$
d) $\sqrt{57}$
e) $\sqrt{79.5}$
f) $\sqrt{96}$
2) Use benchmarks to estimate the following. Show your work.
a) $\sqrt{ } 0.08$
b) $\sqrt{0.45}$
c) $\sqrt{0.6}$
3) Estimate. Show your work.
a) $\sqrt{\frac{3}{23}}$
b) $\sqrt{\frac{1}{50}}$
4) $2^{3}=8$ (two cubed equals eight), so $\sqrt[3]{8}=2$ (the cube root of eight is two).
a) Create a parallel statement for $3^{3}$. Confirm on your calculator.
b) Create a parallel statement for $4^{3}$. Confirm on your calculator.
5) $2^{4}=16$, so $\sqrt[4]{16}=2$ (the $4^{\text {th }}$ root of 16 is two).
a) Create a parallel statement for $3^{4}$. Confirm on your calculator.
b) Create a parallel statement for $4^{4}$. Confirm on your calculator.
