

Name: _____

Date: _____

Square Root Assignment

1) Simplify without a calculator. Then use a calculator to check.

- a) $\sqrt{100}$ b) $\sqrt{16}$ c) $\sqrt{49}$ d) $\sqrt{1}$ e) $\sqrt{121}$ f) $\sqrt{144}$

2) Simplify with a calculator. Round to the nearest hundredth.

- a) $\sqrt{2}$ b) $\sqrt{12}$ c) $\sqrt{90}$ d) $\sqrt{21.5}$

3) Find the side length of each square with the following area:

- a) 36m^2 b) 81cm^2 c) 20.25m^2

4) Simplify without a calculator as a fraction in lowest terms. Then use a calculator to check.

- a) $\sqrt{\frac{9}{16}}$ b) $\sqrt{\frac{25}{64}}$ c) $\sqrt{\frac{1}{49}}$ d) $\sqrt{\frac{81}{100}}$

5) Simplify without a calculator. Then use a calculator to check.

- a) $\sqrt{0.04}$ b) $\sqrt{0.36}$ c) $\sqrt{0.0001}$ d) $\sqrt{0.0144}$

6) We generally imagine that the resulting square root is smaller than its square (look at question #2). Explain why the square root values from #5 are bigger than the original square.

7) Explain why it is not possible to square root a negative number.

