

Name: _____

Date: _____

Square Root Unit Practice Test

1) Simplify: (a) $\sqrt{64}$ (b) $\sqrt{25}$ (c) $\sqrt{1}$ (d) $\sqrt{49}$ (e) $\sqrt{81}$

2) A square has an area of 36m^2 . Determine the side length (with correct units):

3) Simplify as a fraction (a) $\sqrt{\frac{100}{9}}$ (b) $\sqrt{\frac{4}{25}}$ (c) $\sqrt{\frac{16}{36}}$ (d) $\sqrt{\frac{81}{49}}$

In lowest terms:

4) Simplify first without a calculator, and then confirm with a calculator.

a) $\sqrt{0.25}$ (b) $\sqrt{0.01}$ (c) $\sqrt{0.81}$ (d) $\sqrt{0.0036}$ (e) $\sqrt{0.0004}$

5) What is the answer to $\sqrt{-16}$? Explain:

6) Make a square root estimation chart for 1 to 100:

7) Using the chart above, estimate the square root of:

a) $\sqrt{10}$ (b) $\sqrt{75}$ (c) $\sqrt{40}$ (d) $\sqrt{21}$ (e) $\sqrt{62}$ (f) $\sqrt{86}$

8) Construct a square root estimation chart for 0.01 to 1:

9) Using the chart above, estimate the square root of:

a) $\sqrt{0.17}$ b) $\sqrt{0.32}$ c) $\sqrt{0.92}$ d) $\sqrt{0.59}$

10) Estimate without a calculator: a) $\sqrt{\frac{26}{37}}$ b) $\sqrt{\frac{42}{10}}$

11) Simplify: (a) $\sqrt[3]{27}$ (b) $\sqrt[3]{216}$ (c) $\sqrt[4]{16}$

12) Find the missing variable to the nearest tenth

