

Math 98 Worksheet #1
June 28, 2007

1. Evaluate the following.

(a) $-\sqrt[3]{64}$

(b) $\sqrt[3]{13^3}$

(c) $81^{1/2}$

(d) $8^{4/3}$

2. Simplify the following.

(a) $x^{1/3} \cdot x^{1/4}$

(b) $\sqrt{5} \cdot \sqrt{z}$

(c) $\sqrt{\frac{a^2}{9}}$

3. Graph the function $f(x) = \sqrt{x-2}$ and give its domain and range.

4. Simplify the following.

(a) $(-32)^{3/5}$

(b) $\left(\frac{125}{27}\right)^{-1/3}$

(c) $k^{1/3}(3k^{5/3} + k^{-4/3})$

(d) $\frac{a^{3/4}}{a^{5/4} \cdot a^{-2}}$

(e) $\sqrt[6]{\sqrt[4]{x^2}}$