

Unit 6.2 Radical Expressions and Fractional Exponents

1. Convert the following expressions into radical form, do not solve

a. $9^{\frac{1}{2}}$ = _____

b. $8^{\frac{1}{3}}$ = _____

c. $64^{\frac{2}{3}}$ = _____

d. $32^{\frac{3}{5}}$ = _____

e. $16^{\frac{3}{2}}$ = _____

f. $81^{\frac{3}{4}}$ = _____

g. $x^{\frac{2}{5}}$ = _____

h. $y^{\frac{1}{4}}$ = _____

2. Convert the following into fractional exponent form, do not solve

a. $\sqrt[3]{x^2} =$ _____

b. $\sqrt[5]{y} =$ _____

c. $\sqrt{t^3} =$ _____

d. $\sqrt{x} =$ _____

3. Evaluate the following (if no solution write NaN)

a. $(-4)^{\frac{1}{2}} =$ _____

b. $-64^{\frac{1}{3}} =$ _____

c. $-(64)^{\frac{2}{3}} =$ _____

d. $-16^{\frac{3}{4}} =$ _____

e. $-16^{\frac{3}{2}} =$ _____

f. $-(81)^{\frac{3}{4}} =$ _____