

Unit 4: Rational/Radical

1) NC Simplify: $36^{\frac{1}{2}}$

2) NC Simplify: $8^{\frac{2}{3}}$

3) NC Convert to radical form: $X^{\frac{4}{5}}$

4) NC Convert to exponential form: $(\sqrt[4]{X})^3$

5) NC Simplify:

6) Simplify: $X^{\frac{2}{3}} \cdot X^{\frac{3}{4}}$

a) $\sqrt{72}$

b) $\sqrt{200}$

7) NC Simplify: $\frac{w^2xy^{-3}z}{w^5x^3y^3z^{-4}}$

8) NC Simplify: $\frac{x^{-3}y^2z}{x^2y^{-7}z}$

9) NC Solve: $\frac{4}{x} = \frac{-3}{x+8}$

10) Solve $\frac{x^2+11x+30}{x^2+3x-18}$

11) $\sqrt{3x-5} = 7$

12) $\sqrt{90-x} = x$

13) $\sqrt{x-5} = \sqrt{10-2x}$