

**UNIT 5 WORKSHEET 3**  
**Solving Equations Involving Rational Exponents**

Solve each of the following equations. Don't forget to check for extraneous roots.

A)  $(2x-3)^{2/3} = 16$

B)  $x^{-1/2} = 6$

C)  $4x^{1/2} - 3 = 9$

D)  $(4x-1)^{3/4} = -8$

E)  $(3x-1)^{-2/3} = \frac{1}{4}$

F)  $(5x+6)^{2/5} = 4$

G)  $(9x)^{-2/3} = 4$

H)  $\sqrt[3]{(x+1)^2} = 9$

I)  $9x^{-2/3} = 4$

J)  $\sqrt[3]{x^2-1} = 3$

K)  $x^{2/3} - 2x^{1/3} - 15 = 0$

L)  $\sqrt{(3x-1)^3} = 27$