C11 - 5.0 - Square/Cube Radicals Equations HW

Solve for x,

$x^2 = 4$

$x^2 = 9$

$x^2 = -1$

$x^2 = 25$

$x^2 = 0$

$x^2 = -9$

$x^3 = 27$

$x^3 = 8$

$x^3 = 64$

$x^3 = -8$

$x^3 = -27$

$x^3 = -64$

$x^4 = 16$

$x^5 = 243$

$x^7 = 128$

$x^4 = -16$

$x^5 = -243$

$x^7 = -128$

$x^2 = 3$

$x^3 = 7$

$x^4 = -5$

C11 - 5.0 - Simplify Radicals Variables HW

Simplify. Variables can be either positive or negative.

$\sqrt{4}$ $\sqrt{2^2}$ $\sqrt{x^2}$ $\sqrt{16x^2}$

$\sqrt{9x^2}$ $\sqrt{x^6}$ $\sqrt{x^{10}}$ $\sqrt{4x^4}$

Simplify. Variables are positive

$\sqrt{x^2y^2}$ $\sqrt{x^3}$ $\sqrt{x^5}$ $\sqrt{8x^2y^3}$

$\sqrt[3]{27}$ $\sqrt[3]{27x^3}$ $\sqrt[3]{-27x^3}$ $\sqrt[3]{-8x^3}$

$\sqrt[3]{x^6}$ $\sqrt[3]{x^5}$ $\sqrt[3]{-x^7}$ $\sqrt[5]{x^6y^3}$

C11 - 5.0 - Simplify Radicals Factoring Notes

Simplify. Variables are positive. Possibly Factor.

$\sqrt{(x-2)^2}$

$\sqrt{(x+5)^2}$

$\sqrt{(x-.01)^2}$

$\sqrt[3]{(x-3)^3}$

$\sqrt[7]{(x-3)^7}$

$\sqrt[99]{(x-3)^{99}}$

$\sqrt{(x+3)(x+3)}$

$\sqrt{x^2+6x+9}$

$\sqrt{x^2+2x+1}$

$\sqrt{x^4+2x^2+1}$

$\sqrt{(x-1)(x^2-1)}$

$\sqrt{(Only\ This!)^2}$

C11 - 5.0 - Mixed Radicals HW

Write as Mixed Radicals

$\sqrt[2]{12} =$

$2\sqrt[2]{18} =$

$3\sqrt[2]{45} =$

$\frac{1}{5}\sqrt[2]{50} =$

$\frac{1}{8}\sqrt[2]{20x^2} =$

$\frac{\sqrt[2]{63}}{3}$

$\frac{3}{4}\sqrt[2]{24x^5} =$

$\frac{2}{5}\sqrt[2]{54} =$

$\frac{3}{5}\sqrt[2]{40} =$

$3\sqrt[3]{24} =$

$\frac{1}{9}\sqrt[3]{54x^3} =$

$2\sqrt[3]{135} =$

$\frac{3}{5}\sqrt[3]{40} =$

$\frac{2}{7}\sqrt[3]{189x^7} =$

$\frac{1}{2}\sqrt[3]{56} =$

$2/3\sqrt[3]{48} =$

$\frac{5}{6}\sqrt[3]{162} =$

$\frac{1}{4}\sqrt[3]{80} =$

C11 - 5.0 - Entire Radicals HW

Write as Entire Radicals

$2\sqrt[2]{3} =$

$3\sqrt[2]{2} =$

$5x\sqrt[2]{2} =$

$4\sqrt[2]{5} =$

$2x^2\sqrt[2]{7} =$

$7\sqrt[2]{2x}$

$4x\sqrt[2]{7x} =$

$7\sqrt[2]{6} =$

$13x^2\sqrt[2]{3x} =$

$2\sqrt[2]{99} =$

$5\sqrt[2]{1000} =$

$7\sqrt[2]{4} =$

$2\sqrt[3]{8} =$

$7\sqrt[3]{6} =$

$4xy\sqrt[3]{5xy} =$

$2\sqrt[3]{48} =$

$3\sqrt[3]{12} =$

$8\sqrt[3]{8} =$

C11 - 5.0 - Simplifying Radicals Decimals/Fractions HW

Simplify

$-\sqrt{16}$ $-\sqrt{9}$ $\sqrt{\frac{1}{16}}$ $\sqrt{\frac{1}{9}}$

$\sqrt{-9}$ $-\sqrt{-9}$ $\sqrt{.01}$ $\sqrt{.0625}$

$-\sqrt[4]{81}$ $\sqrt[3]{-27}$ $\sqrt[5]{-32}$ $\sqrt[3]{-0.125}$