TRS 92 Homework: Rational Exponents and Literal Equations

Rational Exponents:
- Read Section 8.2 p. 655-658 in textbook

1. Rewrite in rational exponent form:

   a. $\sqrt[3]{x^4}$ b. $\sqrt[5]{a^2}$ c. $\sqrt{x^3}$

2. Rewrite in radical exponent form:

   a. $x^{\frac{8}{7}}$ b. $a^{\frac{1}{4}}$ c. $3b^{\frac{5}{2}}$

3. Simplify each expression completely, leaving no negative exponents. Remember the rules of exponents from Review #1 and Review #2.

   a. $x^{\frac{1}{5}} \bullet x^{\frac{1}{2}}$ b. $\sqrt[3]{5} \bullet \sqrt{5}$ c. $\dfrac{\sqrt[4]{x^3}}{\sqrt{x}}$

   d. $\left(4n^{\frac{2}{3}}\right)^{-4}$ e. $\sqrt[3]{-27u^3v^{12}}$ f. $(\sqrt[4]{a})^8$

Literal Equations:
- Read Section 2.4 p. 155-158 in textbook
- Do the following practice problems from the reading: Practice #2, 3, 5
- Complete Exercises p. 159-161: #25, 30, 34, 39-41, 43, 44, 57