Name: _____   Date: _____

Learning Goal 5.3	Apply order of operations to radical expressions.

Multiply. Simplify the products where possible. State any restrictions on the variable, if any.

a. $5\sqrt{3}(\sqrt{6})$

b. $-2\sqrt[3]{11}(4\sqrt[3]{2} - 3\sqrt[3]{3})$

c. $(4\sqrt{2} + 3)(\sqrt{7} - 5\sqrt{14})$

d. $-2\sqrt{11c}\left(4\sqrt{2c^3} - 3\sqrt{3}\right)$

Divide. Simplify the products where possible. State any restrictions on the variable, if any.

a. $\dfrac{2\sqrt{51}}{\sqrt{3}}$

b. $\dfrac{-7}{2\sqrt[3]{9p}}$

c. $\dfrac{2}{3\sqrt{5} - 4}$

d. $\dfrac{6}{\sqrt{4x} + 1}$