

Exercise 18**Radicals and Exponents** Evaluate each expression.

(a) $(-5)^3$

(b) -5^3

(c) $(-5)^2 \cdot \left(\frac{2}{5}\right)^2$

Solution

Evaluate these expressions.

$$(-5)^3 = (-1)^3(5)^3 = (-1)(125) = -125$$

$$-5^3 = (-1)(5)^3 = (-1)(125) = -125$$

$$(-5)^2 \cdot \left(\frac{2}{5}\right)^2 = (-1)^2(5)^2 \cdot \left(\frac{2^2}{5^2}\right) = (1)(25) \cdot \left(\frac{4}{25}\right) = 25 \left(\frac{4}{25}\right) = 4$$