8.1 Key Concepts 2 Exponents Worked Example

Example: Write $\left(\frac{3}{4}\right)^5$ in an equivalent form.

Solution: Both the numerator and the denominator must be raised to the exponent 5.

$$\left(\frac{3}{4}\right)^{\!\!5}=\frac{3^5}{4^5}$$

Practice:

1. Write
$$\left(\frac{2}{3}\right)^4$$
 in an equivalent form.

2. Evaluate
$$\left(\frac{4}{7}\right)^3$$
.

Answers: 1.
$$\frac{2^4}{3^4}$$
 2. $\frac{64}{343}$.