Practice

1. Evaluate each power.

a) $6^{-2} =$

b) $5^{-1} =$

c) $2^{-5} =$

d) $\frac{1}{2^{-4}} =$

e) $\frac{1}{3^{-3}} =$

f) $\frac{1}{10^{-1}} =$

2. Use the fact that $4^3 = 64$. Write 4^{-3} as a fraction.

$4^{-3} =$

3. Write each power as a fraction with a radical in the denominator.

a) $3^{-\frac{1}{2}} =$

b) $2^{-\frac{1}{3}} =$

c) $8^{-\frac{1}{4}} =$

4. Write each power with a positive exponent.

a) $3^{-\frac{2}{3}} =$

b) $2^{-\frac{3}{2}} =$

c) $\left(\frac{5}{6}\right)^{-4} =$

5. Evaluate each power.

a) $100^{-\frac{1}{2}} =$

b) $(-125)^{-\frac{1}{3}} =$

c) $16^{-\frac{1}{4}} =$

6. Evaluate each power.

a) $100^{-\frac{3}{2}} =$

b) $(-125)^{-\frac{4}{3}} =$

c) $16^{-\frac{5}{4}} =$

7. Evaluate each power.

a) $\left(\frac{5}{6}\right)^{-2} =$

b) $\left(\frac{2}{7}\right)^{-3} =$

c) 2.9^{-4}

Use a calculator.