

Working with the Number System**Pre-Assessment**

Circle the letter of the best answer.

1. Which expression is equivalent to $(-2)^{\frac{12}{14}}$?

a. $\sqrt{(-2)^{14}}$

c. $\sqrt[12]{(-2)}$

b. $\sqrt[14]{(-2)^{12}}$

d. $\sqrt[12]{(-2)^{14}}$

2. What is the approximate value of $\sqrt[8]{12^3}$?

a. 2.54

c. 754.77

b. 36.00

d. 1,728.00

3. What is the value of $16^{\frac{5}{4}}$?

a. 2

c. 32

b. 4

d. 1,024

4. Which sum is rational?

a. $\sqrt[2]{25} + 4^{\frac{2}{3}}$

c. $\sqrt[4]{81^3} + \frac{5}{9}$

b. $\frac{3}{5} + 6^{\frac{1}{9}}$

d. $\sqrt{7} + 10$

5. Let $\sqrt[5]{x^2} = 11$. What is the approximate value of x ?

a. 3.32

c. 121.00

b. 2.61

d. 401.31