

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

## Zero and Negative Exponents Exit Quiz

Evaluate the following expressions.

1.  $-2^{-4}$

2.  $-2^{-3} + a^0 - 2$

3.  $\left(\frac{x^{-2}}{y^0}\right)^{-1}$

4.  $\frac{-5^2 - 5^{-1}}{-5^0}$

5.  $-2^0 - 2 + 2^{-1} - 2^{-2} + 2^{-3}$

# Zero and Negative Exponents Exit Quiz

## Answer:

Evaluate the following expressions.

$$1. -2^{-4} = -\frac{1}{2^4} = -\frac{1}{16}$$

$$2. -2^{-3} + a^0 - 2 = -\frac{1}{8} + 1 - 2 = \frac{-1-8}{8} = -\frac{9}{8}$$

$$3. \left(\frac{x^{-2}}{y^0}\right)^{-1} = \left(\frac{1}{x^2}\right)^{-1} = x^2$$

$$4. \frac{-5^2 - 5^{-1}}{-5^0} = 5^2 + \frac{1}{5} = \frac{126}{5}$$

$$5. -2^0 - 2 + 2^{-1} - 2^{-2} + 2^{-3} = -1 - 2 + \frac{1}{2} - \frac{1}{4} + \frac{1}{8} = \frac{-8-16+4-2+1}{8} = -\frac{21}{8}$$