

# Exponents

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Evaluate the Exponents.

1)  $10y^6 \times 5y^{-10} =$  \_\_\_\_\_

2)  $20x^3 \times 4x^{-9} =$  \_\_\_\_\_

3)  $\left(\frac{6}{3}\right)^6 \times \left(\frac{4}{8}\right)^{-10} =$  \_\_\_\_\_

4)  $2a^6b^7 \times 3a^{-7}b^{-9} =$  \_\_\_\_\_

5)  $6c^8 \times 2c^{-6} \times 3c^{-5} =$  \_\_\_\_\_

6)  $13mn^{-9} \times 3m^{-8}n^2 =$  \_\_\_\_\_

7)  $\left(\frac{1}{8y}\right)^7 \times \left(\frac{1}{8y}\right)^8 =$  \_\_\_\_\_

8)  $5b^2 \times 8b^{-11} \times 3b^{10} =$  \_\_\_\_\_

9)  $12z^{-12} \times 2z^3 =$  \_\_\_\_\_

10)  $\left(\frac{18}{2}\right)^{-8} \times \left(\frac{21}{7}\right)^{12} =$  \_\_\_\_\_

11)  $15n^{-10} \times 3n^7 =$  \_\_\_\_\_

12)  $13n^{10} \times 3n^{-6} =$  \_\_\_\_\_

13)  $16x^{-8} \times 4x^{-6} =$  \_\_\_\_\_

14)  $\left(\frac{9p}{12p}\right)^7 \times \left(\frac{2p}{8p}\right)^4 =$  \_\_\_\_\_

15)  $\left(\frac{8}{2a}\right)^{13} \times \left(\frac{14}{7a}\right)^{-7} =$  \_\_\_\_\_

16)  $9y^8 \times 7y^{-12} =$  \_\_\_\_\_

# Exponents

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## Evaluate the Exponents.

$$1) \quad 10y^6 \times 5y^{-10} = \frac{50}{y^4}$$

$$2) \quad 20x^3 \times 4x^{-9} = \frac{80}{x^6}$$

$$3) \quad \left(\frac{6}{3}\right)^6 \times \left(\frac{4}{8}\right)^{-10} = \frac{2^{16}}{1}$$

$$4) \quad 2a^6b^7 \times 3a^{-7}b^{-9} = \frac{6}{ab^2}$$

$$5) \quad 6c^8 \times 2c^{-6} \times 3c^{-5} = \frac{36}{c^3}$$

$$6) \quad 13mn^{-9} \times 3m^{-8}n^2 = \frac{39}{m^7n^7}$$

$$7) \quad \left(\frac{1}{8y}\right)^7 \times \left(\frac{1}{8y}\right)^8 = \frac{\left(\frac{1}{8y}\right)^{15}}{1}$$

$$8) \quad 5b^2 \times 8b^{-11} \times 3b^{10} = \frac{120b}{1}$$

$$9) \quad 12z^{-12} \times 2z^3 = \frac{24}{z^9}$$

$$10) \quad \left(\frac{18}{2}\right)^{-8} \times \left(\frac{21}{7}\right)^{12} = \frac{\left(\frac{1}{81}\right)}{1}$$

$$11) \quad 15n^{-10} \times 3n^7 = \frac{45}{n^3}$$

$$12) \quad 13n^{10} \times 3n^{-6} = \frac{39n^4}{1}$$

$$13) \quad 16x^{-8} \times 4x^{-6} = \frac{64}{x^{14}}$$

$$14) \quad \left(\frac{9p}{12p}\right)^7 \times \left(\frac{2p}{8p}\right)^4 = \frac{3^7}{4^{11}}$$

$$15) \quad \left(\frac{8}{2a}\right)^{13} \times \left(\frac{14}{7a}\right)^{-7} = \frac{2^{19}}{a^6}$$

$$16) \quad 9y^8 \times 7y^{-12} = \frac{63}{y^4}$$