

## Dividing Exponents

Date \_\_\_\_\_ Period \_\_\_\_\_

**Divide.**

1)  $\frac{8^{-4}}{8^0}$

2)  $\frac{n^2}{n^{-5}}$

3)  $\frac{4^{-2}}{4^{-4}}$

4)  $\frac{k^1}{k^5}$

5)  $\frac{5^{-2}}{5^{-3}}$

6)  $\frac{2^{-3}}{2^0}$

7)  $\frac{e^4}{e^2}$

8)  $\frac{4^{-5}}{4^2}$

9)  $\frac{w^{-4}}{w^1}$

10)  $\frac{e^5}{e^{-1}}$

11)  $\frac{6^4}{6^1}$

12)  $\frac{q^3}{q^{-5}}$

13)  $\frac{3^3}{3^{-4}}$

14)  $\frac{t^{-3}}{t^4}$

15)  $\frac{v^1}{v^{-5}}$

16)  $\frac{3^3}{3^1}$

## Dividing Exponents

**Divide.**

1)  $\frac{8^{-4}}{8^0}$

Answer:  
 $8^{-4}$

2)  $\frac{n^2}{n^{-5}}$

Answer:  $n^7$

3)  $\frac{4^{-2}}{4^{-4}}$

Answer:  $4^2$

4)  $\frac{k^1}{k^5}$

Answer:  
 $k^{-4}$

5)  $\frac{5^{-2}}{5^{-3}}$

Answer:  $5^1$

6)  $\frac{2^{-3}}{2^0}$

Answer:  
 $2^{-3}$

7)  $\frac{e^4}{e^2}$

Answer:  $e^2$

8)  $\frac{4^{-5}}{4^2}$

Answer:  
 $4^{-7}$

9)  $\frac{w^{-4}}{w^1}$

Answer:  
 $w^{-5}$

10)  $\frac{e^5}{e^{-1}}$

Answer:  $e^6$

11)  $\frac{6^4}{6^1}$

Answer:  $6^3$

12)  $\frac{q^3}{q^{-5}}$

Answer:  $q^8$

13)  $\frac{3^3}{3^{-4}}$

Answer:  $3^7$ 

14)  $\frac{t^{-3}}{t^4}$

Answer:  
 $t^{-7}$ 

15)  $\frac{v^1}{v^{-5}}$

Answer:  $v^6$ 

16)  $\frac{3^3}{3^1}$

Answer:  $3^2$ 

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Name \_\_\_\_\_

Dividing Exponents

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solution Steps**

1)  $\frac{8^{-4}}{8^0}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{8^{-4}}{8^0}$$
$$8^{-4-0}$$

2)  $\frac{n^2}{n^{-5}}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{n^2}{n^{-5}}$$
$$n^{2-(-5)}$$

3)  $\frac{4^{-2}}{4^{-4}}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{4^{-2}}{4^{-4}}$$
$$4^{-2-(-4)}$$

4)  $\frac{k^1}{k^5}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{k^1}{k^5}$$
$$k^{1-5}$$

5)  $\frac{5^{-2}}{5^{-3}}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{5^{-2}}{5^{-3}}$$
$$5^{-2-(-3)}$$

6)  $\frac{2^{-3}}{2^0}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{2^{-3}}{2^0}$$
$$2^{-3-0}$$

7)  $\frac{e^4}{e^2}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{e^4}{e^2}$$
$$e^{4-2}$$

8)  $\frac{4^{-5}}{4^2}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{4^{-5}}{4^2}$$
$$4^{-5-2}$$

$$9) \frac{w^{-4}}{w^1}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{w^{-4}}{w^1} \\ w^{-4-1}$$

$$10) \frac{e^5}{e^{-1}}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{e^5}{e^{-1}} \\ e^{5-(-1)}$$

$$11) \frac{6^4}{6^1}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{6^4}{6^1} \\ 6^{4-1}$$

$$12) \frac{q^3}{q^{-5}}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{q^3}{q^{-5}} \\ q^{3-(-5)}$$

$$13) \frac{3^3}{3^{-4}}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{3^3}{3^{-4}} \\ 3^{3-(-4)}$$

$$14) \frac{t^{-3}}{t^4}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{t^{-3}}{t^4} \\ t^{-3-4}$$

$$15) \frac{v^1}{v^{-5}}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{v^1}{v^{-5}} \\ v^{1-(-5)}$$

$$16) \frac{3^3}{3^1}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{3^3}{3^1} \\ 3^{3-1}$$