

Dividing Exponents

Date _____ Period _____

Divide.

1) $\frac{p^3}{p^5}$

2) $\frac{6^{-2}}{6^{-5}}$

3) $\frac{3^5}{3^0}$

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

5) $\frac{7^4}{7^0}$

6) $\frac{f^4}{f^{-3}}$

7) $\frac{k^4}{k^{-4}}$

8) $\frac{w^{-1}}{w^{-3}}$

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

10) $\frac{c^0}{c^{-2}}$

11) $\frac{4^{-2}}{4^0}$

12) $\frac{f^{-2}}{f^4}$

13) $\frac{3^2}{3^3}$

14) $\frac{p^3}{p^{-3}}$

15) $\frac{h^0}{h^1}$

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

Dividing Exponents

Divide.

1) $\frac{p^3}{p^5}$

Answer:
 p^{-2}

2) $\frac{6^{-2}}{6^{-5}}$

Answer: 6^3

3) $\frac{3^5}{3^0}$

Answer: 3^5

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

Answer: 7^6

5) $\frac{7^4}{7^0}$

Answer: 7^4

6) $\frac{f^4}{f^{-3}}$

Answer: f^7

7) $\frac{k^4}{k^{-4}}$

Answer: k^8

8) $\frac{w^{-1}}{w^{-3}}$

Answer: w^2

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

Answer:
 2^{-8}

10) $\frac{c^0}{c^{-2}}$

Answer: c^2

11) $\frac{4^{-2}}{4^0}$

Answer:
 4^{-2}

12) $\frac{f^{-2}}{f^4}$

Answer:
 f^{-6}

13) $\frac{3^2}{3^3}$

Answer:
 3^{-1}

14) $\frac{p^3}{p^{-3}}$

Answer: p^6

15) $\frac{h^0}{h^1}$

Answer:
 h^{-1}

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

Answer: 8^5

MathVine - Pre-Algebra

Name _____

Dividing Exponents

Date _____ Period _____

Solution Steps

1) $\frac{p^3}{p^5}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{p^3}{p^5}$$

$$p^{3-5}$$

$$p^{-2}$$

2) $\frac{6^{-2}}{6^{-5}}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{6^{-2}}{6^{-5}}$$

$$6^{-2-(-5)}$$

$$6^{-2+5}$$

$$6^3$$

3) $\frac{3^5}{3^0}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{3^5}{3^0}$$

$$3^{5-0}$$

$$3^5$$

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

When dividing exponents with like bases, you subtract the exponents

$$\frac{7^4}{7^{-2}}$$

$$7^{4-(-2)}$$

$$7^{4+2}$$

$$7^6$$

5) $\frac{7^4}{7^0}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{7^4}{7^0}$$

$$7^{4-0}$$

$$7^4$$

6) $\frac{f^4}{f^{-3}}$

When dividing exponents with like bases, you subtract the exponents

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

$$f^{4-(-3)}$$

$$f^{4+3}$$

$$f^7$$

7) $\frac{k^4}{k^{-4}}$

When dividing exponents with like bases, you subtract the exponents

$$\frac{k^4}{k^{-4}}$$

$$k^{4-(-4)}$$

$$k^{4+4}$$

$$k^8$$

8) $\frac{w^{-1}}{w^{-3}}$

When dividing exponents with like bases, you subtract the exponents

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

$$w^{-1-(-3)}$$

$$w^{-1+3}$$

$$w^2$$

$$9) \frac{2^{-4}}{2^4}$$

When dividing exponents with like bases, you subtract the exponents

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

$$10) \frac{c^0}{c^{-2}}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{c^0}{c^{-2}} \\ c^{0-(-2)}$$

$$11) \frac{4^{-2}}{4^0}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{4^{-2}}{4^0} \\ 4^{-2-0}$$

$$12) \frac{f^{-2}}{f^4}$$

When dividing exponents with like bases, you subtract the exponents

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

$$13) \frac{3^2}{3^3}$$

When dividing exponents with like bases, you subtract the exponents

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

$$14) \frac{p^3}{p^{-3}}$$

When dividing exponents with like bases, you subtract the exponents

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

$$15) \frac{h^0}{h^1}$$

When dividing exponents with like bases, you subtract the exponents

$$\frac{h^0}{h^1} \\ h^{0-1}$$

$$16) \frac{8^1}{8^{-4}}$$

When dividing exponents with like bases, you subtract the exponents

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