

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

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

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

## Powers of Quotients

Simplify the exponents.

1)  $\left(\frac{7^5}{7}\right)^2$

7)  $\left(\frac{3d^4}{2d^2}\right)^2$

2)  $\left(\frac{4^3}{4^2}\right)^2$

8)  $\left(\frac{2g^5}{4g^3s^2}\right)^2$

3)  $\left(\frac{4y^3}{3y}\right)^3$

9)  $\left(\frac{5r^2h^3}{7r^5h^4}\right)^2$

4)  $\left(\frac{z}{z^3}\right)^2$

10)  $\left(\frac{2ck^6}{6c^2k^3}\right)^3$

5)  $\left(\frac{n^4}{n^6}\right)^2$

11)  $\left(\frac{wc}{6w^2c^5}\right)^3$

6)  $\left(\frac{5z}{4z^3}\right)^2$

12)  $\left(\frac{8b^2k^4}{7bk^3}\right)^3$



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## Powers of Quotients

Simplify the exponents.

$$1) \left( \frac{7^5}{7} \right)^2$$
$$7^8$$

$$2) \left( \frac{4^3}{4^2} \right)^2$$
$$4^2$$

$$3) \left( \frac{4y^3}{3y} \right)^3$$
$$\frac{64y^6}{27}$$

$$4) \left( \frac{z}{z^3} \right)^2$$
$$\frac{1}{z^4}$$

$$5) \left( \frac{n^4}{n^6} \right)^2$$
$$\frac{1}{n^4}$$

$$6) \left( \frac{5z}{4z^3} \right)^2$$
$$\frac{25}{16z^4}$$

$$7) \left( \frac{3d^4}{2d^2} \right)^2$$
$$\frac{9d^4}{4}$$

$$8) \left( \frac{2g^5}{4g^3s^2} \right)^2$$
$$\frac{g^4}{4s^4}$$

$$9) \left( \frac{5r^2h^3}{7r^5h^4} \right)^2$$
$$\frac{25}{49r^6h^2}$$

$$10) \left( \frac{2ck^6}{6c^2k^3} \right)^3$$
$$\frac{k^9}{27c^3}$$

$$11) \left( \frac{wc}{6w^2c^5} \right)^3$$
$$\frac{1}{216w^3c^{12}}$$

$$12) \left( \frac{8b^2k^4}{7bk^3} \right)^3$$
$$\frac{512b^3k^3}{343}$$

