

Name : _____

Score : _____

Teacher : _____

Date : _____

Powers of Quotients

Simplify the exponents.

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

7) $\left(\frac{8w^5y^2}{4wy^6}\right)^2$

2) $\left(\frac{5cy^5}{4c^6y^4}\right)^3$

8) $\left(\frac{2k^3}{9k}\right)^2$

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

9) $\left(\frac{9s}{8s^2}\right)^3$

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

10) $\left(\frac{ck}{5c^2k^4}\right)^2$

5) $\left(\frac{2n^2r^6}{8n^3r^5}\right)^2$

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

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

12) $\left(\frac{k^2}{k^6}\right)^2$



Name : _____

Score : _____

Teacher : _____

Date : _____

Powers of Quotients

Simplify the exponents.

$$1) \left(\frac{7^3}{7^4} \right)^2$$
$$\frac{1}{7^2}$$

$$2) \left(\frac{5cy^5}{4c^6y^4} \right)^3$$
$$\frac{125y^3}{64c^{15}}$$

$$3) \left(\frac{4r^2}{7r^4} \right)^2$$
$$\frac{16}{49r^4}$$

$$4) \left(\frac{6^6}{6} \right)^2$$
$$6^{10}$$

$$5) \left(\frac{2n^2r^6}{8n^3r^5} \right)^2$$
$$\frac{r^2}{16n^2}$$

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

$$7) \left(\frac{8w^5y^2}{4wy^6} \right)^2$$
$$\frac{4w^8}{y^8}$$

$$8) \left(\frac{2k^3}{9k} \right)^2$$
$$\frac{4k^4}{81}$$

$$9) \left(\frac{9s}{8s^2} \right)^3$$
$$\frac{729}{512s^3}$$

$$10) \left(\frac{ck}{5c^2k^4} \right)^2$$
$$\frac{1}{25c^2k^6}$$

$$11) \left(\frac{n}{n^5} \right)^2$$
$$\frac{1}{n^8}$$

$$12) \left(\frac{k^2}{k^6} \right)^2$$
$$\frac{1}{k^8}$$

