Level 1: The Basics

You may move on to the next level once a checker has made sure you got a 100%.

Multiplying Powers

Dividing Powers

Negative Exponents

2)
$$\frac{x^9}{x^3}$$

3)
$$(a^5)^2$$

5)
$$n^{-3}$$

Level 2: 2 Properties in 1

You may move on to the next level once a checker has made sure you got a 100%.

1)
$$(x^4 \cdot x^2)^3$$
 $(x^6)^3$

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

3)
$$\frac{f^{9}f^{3}}{f^{5}}$$

$$\frac{\binom{k^1}{k^5}}{\binom{k^6}{k^6}}$$

$$k^{-8} \rightarrow \boxed{\frac{1}{k^8}}$$

Level 3: With coefficients

You may move on to the next level once a checker has made sure you got a 100%.

1)
$$3d^4 \cdot 2d^5$$

3.99.99.5.9.999.9

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

3)
$$(5b^3)^2$$

4)
$$5x^0$$

5)
$$6k^{-3}$$

6)
$$(3m^2)^3$$

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

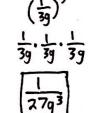
(5.6.6.6)(5.6.6.6)

Level 4: Multiple Variables

You may move on to the next level once a checker has made sure you got a 100%.

$$\frac{1) -4w^4v^{1} - 3w^5v^2}{12w^9v^3}$$

2)
$$\frac{8y^9z^4}{8y^4z^6}$$
 $\frac{3\cdot 1\cdot 1\times 1\times 1\times 1\cdot 1\cdot 1}{3\cdot 1\cdot 1\cdot 1\times 1\cdot 1\cdot 1\cdot 1\cdot 1}$ 3) $(7j^{10}k^5l)^2$ $(7j^{10}k^5l)(7j^{10}k^5l)$ $(7j^{10}k^5l)(7j^{10}k^5l)$



4) $\left(\frac{f^0}{3a}\right)^3$

Level 5: Harder

1)
$$\frac{35p^{9}q^{-3}}{30p^{4}q^{3}}$$

$$\frac{7p^9}{6p^4q^3q^3} \rightarrow \boxed{\frac{7p^5}{6q^6}}$$

You may move on to the next level once a checker has made sure you got a 100%.

$$(\frac{r^{1}s^{3}}{4r^{3}s^{-1}})^{3}$$

$$(\frac{r^{1}s^{3}}{4r^{3}s^{-1}})^{3}$$

$$(\frac{r^{1}s^{3}}{4r^{3}s^{-1}})^{3}$$

$$(\frac{r^{1}s^{3}s^{3}}{4r^{3}s^{-1}})^{3} \rightarrow (\frac{s^{4}}{4})^{3}$$

3)
$$3mn^{-2} \cdot 6m^{-4}n^{5} \cdot \frac{1}{2}m^{0}n^{1}$$

$$\frac{3 \cdot 6 \cdot \frac{1}{2} = 18 \cdot \frac{1}{2} = 9}{m^{1+\frac{1}{2}+1} = m^{\frac{1}{3}}} \longrightarrow 9m^{-3}n^{1}$$

$$\frac{1}{2^{2+5+1}} = n^{4}$$