

Name:

Properties of Exponents: Practice Worksheet

1 $\frac{12^3 - 3^2}{3}$

2 $5a^2y(2a^4y^{-3})$

3 $p^{-3}(p^2)(p^{-3})$

4 $2x^3y^{-3} \cdot 2x^{-1}y^3$

5 $(2a^4b^{-3})^{-1}$

6 $\frac{3p^{-4}}{p^3}$

7 $(a^2)^3 \times a^5$

8 $\left[\left(-\frac{2}{5} \right)^3 \right]^{-2}$

9 $[(-3)^2]^3$

10 $\frac{3x^3y^{-1}z^{-1}}{x^{-4}y^0z^0}$

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Answers

1 $\frac{12^3 - 3^2}{3}$

45

2 $5a^2y(2a^4y^{-3})$

$\frac{10a^6}{y^2}$

3 $p^{-3}(p^2)(p^{-3})$

p^{-4}

4 $2x^3y^{-3} \cdot 2x^{-1}y^3$

$4x^2$

5 $(2a^4b^{-3})^{-1}$

$\frac{b^3}{2a^4}$

6 $\frac{3p^{-4}}{p^3}$

$\frac{3}{p^7}$

7 $(a^2)^3 \times a^5$

a^{11}

8 $\left[\left(-\frac{2}{5} \right)^3 \right]^{-2}$

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

9 $[(-3)^2]^3$

3⁶

10 $\frac{3x^3y^{-1}z^{-1}}{x^{-4}y^0z^0}$

$\frac{3x^7}{yz}$