



Math worksheet on 'Exponents - Power Law with Variable Base (Negatives, Fraction with Power to Exponent) (Level 1)'. Part of a broader unit on 'Exponents - Negative, Fractional, and Power Law'

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**2** Find the answer when these terms are multiplied

$$\frac{1}{n^6} \cdot \frac{1}{n^6} \cdot \frac{1}{n^6}$$

|                       |                       |                        |                       |                      |
|-----------------------|-----------------------|------------------------|-----------------------|----------------------|
| <b>a</b><br>$n^{-18}$ | <b>b</b><br>$n^{-16}$ | <b>c</b><br>$n^{-180}$ | <b>d</b><br>$n^{-15}$ | <b>e</b><br>$n^{-3}$ |
|-----------------------|-----------------------|------------------------|-----------------------|----------------------|

**1** Find the answer when these terms are multiplied

$$\frac{1}{m^3} \cdot \frac{1}{m^3} \cdot \frac{1}{m^3}$$

|                   |                      |                      |                      |
|-------------------|----------------------|----------------------|----------------------|
| <b>a</b><br>$m^0$ | <b>b</b><br>$m^{-9}$ | <b>c</b><br>$m^{-8}$ | <b>d</b><br>$m^{-7}$ |
|-------------------|----------------------|----------------------|----------------------|

**3** Find the answer when these terms are multiplied

$$\frac{1}{b^4} \cdot \frac{1}{b^4} \cdot \frac{1}{b^4} \cdot \frac{1}{b^4} \cdot \frac{1}{b^4}$$

|                       |                 |                       |                       |                       |
|-----------------------|-----------------|-----------------------|-----------------------|-----------------------|
| <b>a</b><br>$b^{-17}$ | <b>b</b><br>$b$ | <b>c</b><br>$b^{-18}$ | <b>d</b><br>$b^{-20}$ | <b>e</b><br>$b^{-16}$ |
|-----------------------|-----------------|-----------------------|-----------------------|-----------------------|

**4** Find the answer when these terms are multiplied

$$\frac{1}{m^6} \cdot \frac{1}{m^6} \cdot \frac{1}{m^6} \cdot \frac{1}{m^6}$$

|                       |                      |                       |                       |
|-----------------------|----------------------|-----------------------|-----------------------|
| <b>a</b><br>$m^{-22}$ | <b>b</b><br>$m^{-2}$ | <b>c</b><br>$m^{-26}$ | <b>d</b><br>$m^{-24}$ |
|-----------------------|----------------------|-----------------------|-----------------------|

**5** Find the answer when these terms are multiplied

$$\frac{1}{y^6} \cdot \frac{1}{y^6}$$

|                       |                          |                      |
|-----------------------|--------------------------|----------------------|
| <b>a</b><br>$y^{-13}$ | <b>b</b><br>$y^{-12}$    | <b>c</b><br>$y^{-1}$ |
| <b>d</b><br>$y^{-10}$ | <b>e</b><br>$y^{-1,200}$ |                      |

**6** Find the answer when these terms are multiplied

$$\frac{1}{y^6} \cdot \frac{1}{y^6} \cdot \frac{1}{y^6} \cdot \frac{1}{y^6}$$

|                          |                       |                       |                       |                       |
|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>a</b><br>$y^{-2,400}$ | <b>b</b><br>$y^{-21}$ | <b>c</b><br>$y^{-22}$ | <b>d</b><br>$y^{-24}$ | <b>e</b><br>$y^{-19}$ |
|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|

**7** Find the answer when these terms are multiplied

$$\frac{1}{x^2} \cdot \frac{1}{x^2} \cdot \frac{1}{x^2}$$

|                      |                      |                   |                       |
|----------------------|----------------------|-------------------|-----------------------|
| <b>a</b><br>$x^{-6}$ | <b>b</b><br>$x^{-5}$ | <b>c</b><br>$x^0$ | <b>d</b><br>$x^{-60}$ |
|----------------------|----------------------|-------------------|-----------------------|