



Math worksheet on 'Exponents - Power Law (Level 1)'. Part of a broader unit on 'Exponents - Multiplication and Division - Advanced'

Learn online:

[app.mobius.academy/math/units/exponents\\_multiplication\\_and\\_division\\_advanced/](http://app.mobius.academy/math/units/exponents_multiplication_and_division_advanced/)

1 Find the answer when these terms are multiplied

$$55^{-3} \cdot 55^{-3} \cdot 55^{-3}$$

- |   |                  |   |   |   |                  |   |                  |
|---|------------------|---|---|---|------------------|---|------------------|
| a | $\frac{1}{55^7}$ | b | 1 | c | $\frac{1}{55^9}$ | d | $\frac{1}{55^8}$ |
|---|------------------|---|---|---|------------------|---|------------------|

2 Find the answer when these terms are multiplied

$$10^{-2} \cdot 10^{-2} \cdot 10^{-2} \cdot 10^{-2}$$

- |   |                     |   |                  |   |   |   |                  |   |                  |
|---|---------------------|---|------------------|---|---|---|------------------|---|------------------|
| a | $\frac{1}{10^{80}}$ | b | $\frac{1}{10^9}$ | c | 1 | d | $\frac{1}{10^6}$ | e | $\frac{1}{10^8}$ |
|---|---------------------|---|------------------|---|---|---|------------------|---|------------------|

3 Find the answer when these terms are multiplied

$$22^{-1} \cdot 22^{-1} \cdot 22^{-1} \cdot 22^{-1}$$

- |   |        |   |   |   |        |   |                  |   |                  |
|---|--------|---|---|---|--------|---|------------------|---|------------------|
| a | $22^0$ | b | 1 | c | $22^3$ | d | $\frac{1}{22^3}$ | e | $\frac{1}{22^4}$ |
|---|--------|---|---|---|--------|---|------------------|---|------------------|

4 Find the answer when these terms are multiplied

$$14^{-2} \cdot 14^{-2} \cdot 14^{-2} \cdot 14^{-2}$$

- |   |        |   |        |   |                  |   |                  |   |                      |
|---|--------|---|--------|---|------------------|---|------------------|---|----------------------|
| a | $14^0$ | b | $14^2$ | c | $\frac{1}{14^8}$ | d | $\frac{1}{14^7}$ | e | $\frac{1}{14^{800}}$ |
|---|--------|---|--------|---|------------------|---|------------------|---|----------------------|

5 Find the answer when these terms are multiplied

$$15^{-1} \cdot 15^{-1} \cdot 15^{-1}$$

- |   |                      |   |        |   |                  |   |                  |   |        |
|---|----------------------|---|--------|---|------------------|---|------------------|---|--------|
| a | $\frac{1}{15^{300}}$ | b | $15^0$ | c | $\frac{1}{15^3}$ | d | $\frac{1}{15^2}$ | e | $15^2$ |
|---|----------------------|---|--------|---|------------------|---|------------------|---|--------|

6 Find the answer when these terms are multiplied

$$6^{-1} \cdot 6^{-1} \cdot 6^{-1} \cdot 6^{-1}$$

- |   |                    |   |                 |   |                     |   |                 |   |       |
|---|--------------------|---|-----------------|---|---------------------|---|-----------------|---|-------|
| a | $\frac{1}{6^{40}}$ | b | $\frac{1}{6^3}$ | c | $\frac{1}{6^{400}}$ | d | $\frac{1}{6^4}$ | e | $6^3$ |
|---|--------------------|---|-----------------|---|---------------------|---|-----------------|---|-------|

7 Find the answer when these terms are multiplied

$$4^{-1} \cdot 4^{-1}$$

- |   |   |   |               |   |                 |
|---|---|---|---------------|---|-----------------|
| a | 4 | b | $\frac{1}{4}$ | c | $\frac{1}{4^2}$ |
|   |   |   |               |   |                 |