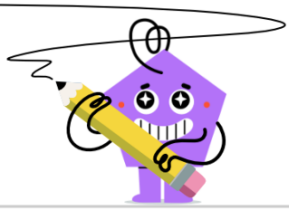
Name



Exponents - Power Law - Intro

1 Find the answer when these terms are multiplied

$$p^2 \cdot p^2 \cdot p^2$$

A p^6	B p^{600}
C p^5	

2 Find the answer when these terms are multiplied

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

A 1	B $\frac{1}{n}$
C $\frac{1}{n^{600}}$	D $\frac{1}{n^6}$

3 Find the answer when these terms are multiplied

$$2^2 \cdot 2^2 \cdot 2^2 \cdot 2^2$$

A 2^7	B 2^0
C 2^9	D 2^8

4 Find the answer when these terms are multiplied

$$\frac{1}{5} \cdot \frac{1}{5} \cdot \frac{1}{5}$$

A 1	B 5^2
C $\frac{1}{5^3}$	D $\frac{1}{5^2}$

5 Find the answer when these terms are multiplied

$$10^3 \cdot 10^3$$

A 10^5	B 10^4
C 10^6	D 10^0

6 Find the answer when these terms are multiplied

$$\frac{1}{21} \cdot \frac{1}{21} \cdot \frac{1}{21}$$

A 21^0	B $\frac{1}{21^3}$	C 21^2
D $\frac{1}{21^{300}}$	E 1	

7 Find the answer when this term is raised to its exponent

$$(x^5)^2$$

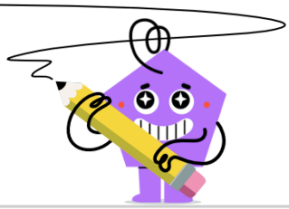
A x^{10}	B $x^{1,000}$
C x^8	D x^9
E x^0	

8 Find the answer when these terms are multiplied

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

A $\frac{1}{c^4}$	B $\frac{1}{c^3}$
C 1	D c^0

Name



Exponents - Power Law - Intro

9 Find the answer when these terms are multiplied

$$\frac{1}{r^5} \cdot \frac{1}{r^5} \cdot \frac{1}{r^5} \cdot \frac{1}{r^5}$$

A r^{-20}	B r^{-1}
C r^{-17}	D $r^{-2,000}$
E r^{-21}	

10 Find the answer when this term is raised to its exponent

$$(7^2)^2$$

A 7^4	B 7^3
C 7^0	D 7^{40}

11 Find the answer when this term is raised to its exponent

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

A 3^{-150}	B 3^{-1}
C 3^{-13}	D 3^{-12}
E 3^{-15}	

12 Find the answer when these terms are multiplied

$$11^{-2} \cdot 11^{-2} \cdot 11^{-2} \cdot 11^{-2}$$

A 11^2	B 11^0	C $\frac{1}{11^7}$
D $\frac{1}{11^8}$	E 1	

13 Find the answer when these terms are multiplied

$$\frac{1}{11^6} \cdot \frac{1}{11^6} \cdot \frac{1}{11^6} \cdot \frac{1}{11^6}$$

A 11^{-24}	B 11^{-27}
C 11^{-21}	D 11^0
E 11^{-26}	

14 Find the answer when this term is raised to its exponent

$$(15^5)^4$$

A 15^{21}	B 15^{20}
C 15^{16}	D 15^{17}

15 Find the answer when this term is raised to its exponent

$$(15^{-1})^5$$

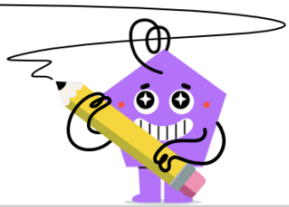
A 15^{-500}	B 15^{-5}
C 15^0	D 15^{-4}
E 15^{-50}	

16 Find the answer when these terms are multiplied

$$33^{-3} \cdot 33^{-3}$$

A 33^0	B $\frac{1}{33^4}$	C $\frac{1}{33^6}$
D $\frac{1}{33^5}$	E $\frac{1}{33^7}$	

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Exponents - Power Law - Intro

17 Find the answer when these terms are multiplied

$$\frac{1}{35^2} \cdot \frac{1}{35^2}$$

A 35^{-40}	B 35^{-3}
C 35^{0}	D 35^{-4}

18 Use the power of a product rule to separate this into a product of powers.

$$(21)^3$$

A $7^3 \cdot 3$	B $7^3 + 3^3$
C $7^3 \cdot 3^3$	D $7 \cdot 3^3$
E $7^6 \cdot 3^6$	

19 Use the power of a product rule to write this as a single power of a product.

$$2^4 \cdot 7^4$$

A $(14)^8$	B $(14)^5$
C $(9)^4$	D $(14)^4$

20 Use the power of a product rule to separate this into a product of powers.

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

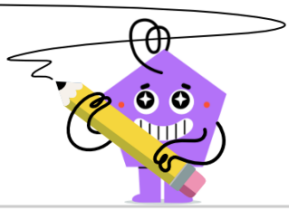
A $\left(\frac{2}{4}\right)^2 \cdot \left(\frac{2}{5}\right)^2$	B $\frac{2}{4} \cdot \left(\frac{2}{5}\right)^2$
C $\left(\frac{2}{4}\right)^4 \cdot \left(\frac{2}{5}\right)^4$	D $\left(\frac{2}{4}\right)^2 + \left(\frac{2}{5}\right)^2$
E $\left(\frac{2}{4}\right)^2 \cdot \frac{2}{5}$	

21 Solve for the missing exponent (x) in reduced form

$$6^n = 36^x$$

A $x = 7n$	B $x = \frac{6}{2n}$
C $x = \frac{n}{2}$	D $x = 8n$
E $x = \frac{n}{3}$	F $x = 6n$

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Exponents - Power Law - Intro

22 Use the power of a product rule to write this as a single power of a product.

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

A $\left(\frac{2}{4}+\frac{1}{4}\right)^2$

B $\left(\frac{2}{4}\cdot\frac{1}{4}\right)^4$

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

D $\left(\frac{2}{4}\cdot\frac{1}{4}\right)^2$

23 Solve for the missing exponent (x) in reduced form

$$3^n = (3^3)^x$$

A $x = \frac{6n}{2}$

B $x = \frac{n}{3}$

C $x = \frac{2}{4n}$

D $x = 2n$

E $x = \frac{6}{2n}$

F $x = 5n$

24 Solve for the missing exponent (x) in reduced form

$$2^n = (2^x)^2$$

A $x = 9n$

B $x = 3n$

C $x = \frac{n}{2}$

D $x = \frac{1}{2n}$

E $x = \frac{2}{3n}$

F $x = \frac{2n}{3}$

25 Solve for the missing exponent (x) in reduced form

$$(3^3)^n = 3^x$$

A $x = \frac{3}{3n}$

B $x = \frac{3}{9n}$

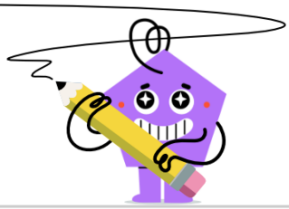
C $x = 3n$

D $x = \frac{3n}{9}$

E $x = n$

F $x = 4n$

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Exponents - Power Law - Intro

26 Solve for the missing exponent (x) in reduced form

$$(5^n)^2 = 5^x$$

A $x = \frac{5}{n}$	B $x = \frac{4n}{1}$
C $x = n$	D $x = 2n$
E $x = 3n$	F $x = \frac{2n}{4}$

27 Solve for the missing exponent (x) in reduced form

$$(3^n)^4 = (3^2)^x$$

A $x = 2n$	B $x = 7n$
C $x = 4n$	D $x = \frac{4}{4n}$
E $x = 6n$	F $x = \frac{8n}{2}$

28 Solve for the missing exponent (x) in reduced form

$$81^n = 3^x$$

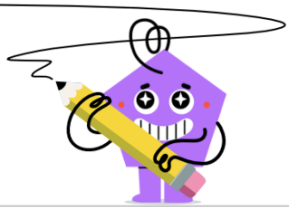
A $x = 7n$	B $x = 4n$
C $x = 2n$	D $x = \frac{3n}{1}$
E $x = \frac{4}{8n}$	F $x = n$

29 Solve for the missing exponent (x) in reduced form

$$4^n = 8^x$$

A $x = 4n$	B $x = \frac{9n}{2}$
C $x = \frac{6n}{3}$	D $x = 3n$
E $x = \frac{2n}{3}$	F $x = \frac{9}{2n}$

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Exponents - Power Law - Intro

30 Solve for the missing exponent (x) in reduced form

$$(2^4)^n = (2^x)^{12}$$

A $x = \frac{4}{12n}$

B $x = \frac{4n}{12}$

C $x = 12n$

D $x = \frac{9}{4n}$

E $x = 4n$

F $x = \frac{n}{3}$

31 Solve for the missing exponent (x) in reduced form

$$(2^2)^n = (2^5)^x$$

A $x = \frac{2n}{5}$

B $x = \frac{6n}{5}$

C $x = 15n$

D $x = \frac{2}{6n}$

E $x = \frac{15}{2n}$

F $x = 4n$

32 Solve for the missing exponent (x) in reduced form

$$32^n = (2^3)^x$$

A $x = \frac{5n}{3}$

B $x = 9n$

C $x = \frac{2}{3n}$

D $x = \frac{6}{5n}$

E $x = 7n$

F $x = \frac{5n}{10}$

33 Solve for the missing exponent (x) in reduced form

$$(4^3)^n = 16^x$$

A $x = \frac{6}{3n}$

B $x = \frac{3n}{2}$

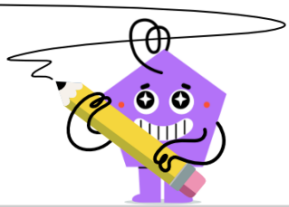
C $x = 8n$

D $x = 3n$

E $x = \frac{4}{2n}$

F $x = \frac{4n}{2}$

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Exponents - Power Law - Intro

34 Solve for the missing exponent (x) in reduced form

$$(4^n)^6 = 64^x$$

A $x = 2n$	B $x = \frac{4n}{3}$
C $x = \frac{2}{4n}$	D $x = \frac{4}{3n}$
E $x = \frac{6}{2n}$	F $x = \frac{6n}{2}$

35 Solve for the missing exponent (x) in reduced form

$$16^n = (2^x)^{12}$$

A $x = \frac{n}{3}$	B $x = 4n$
C $x = \frac{4}{12n}$	D $x = \frac{2}{5n}$
E $x = 5n$	F $x = \frac{15n}{4}$

36 Solve for the missing exponent (x) in reduced form

$$(3^n)^6 = (3^x)^{12}$$

A $x = \frac{4}{12n}$	B $x = \frac{n}{2}$
C $x = \frac{4n}{12}$	D $x = 8n$
E $x = 7n$	F $x = \frac{3n}{2}$