

- ② 5
- ④ r + t
- ⑥ 5 divided by c;
division
- ⑧ 5 plus n;
addition
- ⑩ 14 ⑫ 21 ⑭ 6
- ⑯ 24 cm ⑰ 36 in
- ⑱ D ⑳ A
- ㉒ 2½
- ㉔ 3
- ㉖ 48
- ㉘ 1
- ㉚ 39
- ㉜ 7
- ㉞ 150 mi
- ㉟ 4 km
- ㊳ 1350 mi
- ㊵ 31 ft
- ㊶ 60 in
- ㊸ 30 mi²
- ㊺ 99,550 mi²

1.2.
Exponents &
Powers

Aug 31, 2006

Words to know...

Power / Exponent / Base /
factors

$$2^3 = 2 \cdot 2 \cdot 2$$

Translate 2^3 into English...

2 to the 3rd Power
or

2 cubed

What it means is 2 · 2 · 2

Write the Power into Words.

4^2 → 4 to the Second Power
or 4 squared

5^3 → 5 to the Third Power
or 5 cubed

x^6 → x to the 6 Power

Base to the Exponent Power

ex1

$$x^4 \text{ when } \underline{x=2}$$

Use +
Show
ALL 3
Steps

$$x^4 \rightarrow \text{exp.}$$

$$\underline{(2)^4} \rightarrow \text{sub}$$

$$\underline{2 \cdot 2 \cdot 2 \cdot 2} \rightarrow \text{Simp.}$$
$$\underline{\underline{16}}$$

ex2 | Let a=1 + b=2

i) $(a^2) + (b^2) \rightarrow \text{exp}$

$(\underline{1})^2 + (\underline{2})^2 \rightarrow \text{sub.}$

$\underline{\underline{1}} + \underline{\underline{4}} \} \rightarrow \text{Simp.}$

ii) $(a+b)^2 \rightarrow \text{exp.}$

$(\underline{1} + \underline{2})^2 \rightarrow \text{sub}$

$\underline{\underline{3}}^2 \} \rightarrow \text{Simp.}$

ex 3) Let x = 4

i) $2 \cdot x^3$ \rightarrow exp
 $2 \cdot (4)^3$ \rightarrow sub
 $2 \cdot 64$ } \rightarrow simp.
128

$\begin{array}{r} 2 \\ 16 \\ \hline 4 \\ 64 \\ \hline \end{array}$

ii) $(2 \cdot x)^3$ \rightarrow exp
 $(2 \cdot (4))^3$ \rightarrow sub.
 $(8)^3$ } \rightarrow simp.
512

$\begin{array}{r} 3 \\ 64 \\ 512 \\ \hline 8 \\ 512 \\ \hline \end{array}$

O.T.L.

① Pg 12-? : 1-3(a)
5-8(a)
9-39(o)
41,43,44,45

② Turn in pg 6-? 1-45 odd