



Name _____

POWERFUL PROBLEMS

Simplify each expression. Cross out the answers below. The remaining letters spell out the answer.

REMINDER: The **exponent** indicates the number of times a number is used as a factor.

Ex. $a^4 = a \cdot a \cdot a \cdot a$

- | | |
|--|---|
| 1. $a \cdot a \cdot a \cdot a \cdot a \cdot a =$ _____ | 11. $(a \cdot a \cdot a)/(a \cdot a) =$ _____ |
| 2. $t \cdot t \cdot t \cdot t \cdot t =$ _____ | 12. $(t \cdot t \cdot t \cdot t)/(t \cdot t) =$ _____ |
| 3. $(m \cdot m \cdot m) \cdot (m \cdot m \cdot m \cdot m) =$ _____ | 13. $(m \cdot m \cdot m \cdot m \cdot m)/(m) =$ _____ |
| 4. $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 =$ _____ | 14. $(7 \cdot 7 \cdot 7 \cdot 7 \cdot 7)/(7 \cdot 7) =$ _____ |
| 5. $(10 \cdot 10 \cdot 10 \cdot 10) \cdot (10 \cdot 10 \cdot 10 \cdot 10) =$ _____ | 15. $(10 \cdot 10 \cdot 10)/(10 \cdot 10 \cdot 10) =$ _____ |
| 6. $a^4 \cdot a^4 =$ _____ | 16. $a^6/a^2 =$ _____ |
| 7. $t^5 \cdot t^6 =$ _____ | 17. $t^4/t =$ _____ |
| 8. $y \cdot y^6 =$ _____ | 18. $y^{12}/y^4 =$ _____ |
| 9. $m^2 \cdot m^3 \cdot m^4 =$ _____ | 19. $m^9/m^4 =$ _____ |
| 10. $10^5 \cdot 10^6 \cdot 10^5 =$ _____ | 20. $(10^9 \cdot 10^6)/10^5 =$ _____ |

A measurement of power equal to 746 watts is one _____.

m^7 K	a^2 H	a^6 I	t^4 O	y^7 L	m^9 O	t^3 G	m^6 R	10^{10} A	7^7 S
10^{16} M	m^{24} E	t^{11} J	t^5 O	10^3 P	m^4 U	a L	7^3 E	a^8 M	y^3 O
y^8 E	a^4 T	7^5 W	t^2 E	m^5 R	a^3 E	7^8 A	10^8 T	t^8 R	1 T