

## Today's Learning Goal(s):

Date: \_\_\_\_\_

By the end of the class, I will be able to:

- a) evaluate a power involving an integer exponent.
- b) simplify expressions involving integer exponents.

Last day's work: p. 212 #1 – 10

## 4.2 Working with Integer Exponents

Date: \_\_\_\_\_

Ex.1 Simplify.

a)  $(5^3)(5^4)$

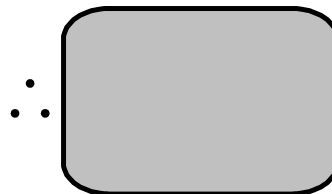
b)  $13^6 \div 13^2$

c)  $(6^3)^4$

d)  $3^4 \div 3^4$

e)  $5^3 \div 5^5$

or



See p. 217

Name	Symbol	Multiple of the Metre	Multiple as a Power of 10
terametre	Tm	1 000 000 000 000	$10^{12}$
gigametre	Gm	1 000 000 000	$10^9$
megametre	Mm	1 000 000	$10^6$
kilometre	km	1 000	$10^3$
hectometre	hm	100	$10^2$
decametre	dam	10	$10^1$
metre	m	1	
decimetre	dm	0.1	
centimetre	cm	0.01	
millimetre	mm	0.001	
micrometre	$\mu m$	0.000 1	
nanometre	nm	0.000 01	
picometre	pm	0.000 001	
femtometre	fm	0.000 000 001	
attometre	am	0.000 000 000 001	

Ex.2 Evaluate. Express your answers as simplified rationals.  
(vs. simplify)

a)  $6^{-2}$

b)  $(-4)^{-2}$

c)  $-4^{-2}$

d)  $\left(\frac{3}{4}\right)^{-2}$

e)  $\frac{(5^{-4})(5^{-2})}{(5^{-3})}$

f)  $\frac{(8^{-4})(2^3)}{(16^{-2})}$

or

Extra Practice (you try)

g)  $2^5(-10)^{-2}$

h)  $15^{-4} \times \left(\frac{15^2}{15^8}\right)^{-1}$

i)  $(3^0 + 3^2)^{-1}$

j)  $\frac{4^5}{2^{-3}} \times \frac{2^{-1}}{4^3}$

Are there any Homework Questions you would like to see on the board?

Last day's work: p. 212 #1 – 10

Recall:  $(-2)^4$  vs  $-2^4$

**READ p.221**

Today's Homework Practice includes:

pp. 221-223 #(1 – 9)ace, 11b, 13ace**gi**, 16ace