

BE-Algebra 1

WEDNESDAY 8-13-08

EVALUATE:

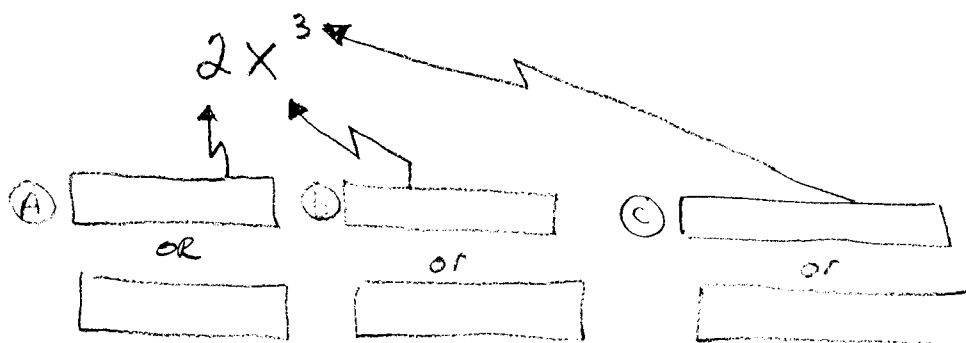
① 6^2

② 3^4

③ 2^6

④ 8^3

⑤ NAME the parts (MORE THAN 1 ANSWER for each)



• TAKE OUT homework

• Remind me to issue textbooks and to take pictures w/ lights. Thanks!

1
You can go backwards $\Rightarrow$ Algebraic
to verbal

① $4m^3$

the product of 4 and m to the 3rd power

② $c^2 + 21d$

the sum of c squared and
the product of 21 and d



Grouping Symbols

() PARENTHESES

* KNOW
HOW TO
SPELL

[] BRACKETS

{ } BRACES

* KNOW HOW
TO DRAW

_____ FRACTION BAR, USED TO
SHOW BOTH DIVISION
AND GROUPING

~~~~~  
"NESTED" Grouping Symbols  $\Rightarrow$  means  
a grouping symbol inside ANOTHER.

Preferred order of nesting:

{ [ ( ) ] }



Solve this problem individually - do not look at your neighbors work or talk to your neighbor please!

$$8 \div 2 \cdot 2 + 3$$

Did you get 5 or 11?

Which is correct?

\*) We need a CONVENTION An Agreed upon way of doing things, like which side of the road to drive on.

What is the "Order of Operations"?

↑  
WHAT comes  
1<sup>st</sup>, 2<sup>nd</sup>, etc

↑  
+, -, •, ÷

There are 4 steps, 2 of the steps are done from left-to-right, they are:

$$\begin{array}{cccc} & \xrightarrow{\quad} & \xrightarrow{\quad} & \\ P & E & (MD) & (AS) \\ \textcircled{1} & \textcircled{2} & \textcircled{3} & \textcircled{4} \end{array}$$

- ① Parentheses or any grouping, everything inside a grouping becomes its own "baby"  $\xrightarrow{\quad} \xrightarrow{\quad}$   $PE(MD)(AS)$  problem
- ② Exponents
- ③ Multiplies OR Divides, whichever comes first, as you go left-to-right.
- ④ After ALL mult/divides done, DO ADDS OR subtracts, whichever comes first, as you go left-to-right.

\*EX ① EX ② EX ③ (Pg 11 & 12 of text)

① A  $3 + 2 \cdot 3 + 5$

$3 + 6 + 5$

$9 + 5 = \boxed{14}$

REWRITE LOOK  
EACH LINE !!

⑥  $15 \div 3 \cdot 5 - 4^2$

$15 \div 3 \cdot 5 - 16$

$5 \cdot 5 - 16$

$25 - 16 = \boxed{9}$

② A  $2(5) + 3(4+3)$

$2(5) + 3(7)$

$10 + 21 = \boxed{31}$

baby PE(MD)(AS) problem  
↓  
(4+3)

③  $2 [5 + (30 \div 6)^2]$

$2 [5 + (5)^2]$

$2 [5 + 25] = 2 [30] = \boxed{60}$

③

2 ↗  
SEPARATE  
"baby"  
PE(MD)(AS)  
problems

$$\frac{6 + 4^2}{3^2 \cdot 4} = \frac{6 + 16}{9 \cdot 4} = \frac{22}{36} = \boxed{\frac{11}{18}}$$

Practice: handout / ck answers in book / help partners.  
(Extra Practice Page 820 Lesson 1-2 # 1-12)