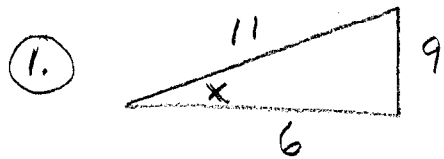


Alg. 1 - BE Monday 4-4-11



$$\sin x = ?$$

$$\cos x = ?$$

$$\tan x = ?$$

LEAVE ANSWERS
AS RATIOS

② $(4x^2y^3)(3x^5y^8) = ?$

③ $10^5 \cdot 10^{12} = ?$

EX 2
Pg 426

Standard to Scientific Notation

(A) 30,500,000

7 places

MADE SMALLER MULTIPLY BY BIGGER

$\therefore 3.05 \times 10^7$

CAN ONLY DROP

TRAILING ZEROS.

(B) 0.000781

4 places

MADE BIG MULTIPLY BY SMALLER

$\therefore 7.81 \times 10^{-4}$

$= 7.81 \cdot \frac{1}{10000}$

$= \frac{7.81}{10000} = \frac{781}{1000000}$ WHY?

EX 1
Pg 426

Scientific to Standard

(A) 2.45×10^3



use 2 places

to get to 245, ADD 6 zeros to get to 3

(B) 3×10^{-5}



GO LEFT 1 place to

get to .3, then left 4 zeros

LETS TAKE THIS FORMAT OUT FOR A SEC:

(EX) Multiply 42000000 • 3000

$$4.2 \times 10^7 \cdot 3 \times 10^3$$

$$4.2 \cdot 3 \cdot 10^7 \cdot 10^3$$

$$12.6 \times 10^{10} \quad \text{WHY?}$$

1.26×10^{11} Proper scientific notation

MAKE Smaller by 10 MAKE Bigger by 10

(EX) Multiply 60000 • 0.00002

$$6 \times 10^4 \cdot 2 \times 10^{-5}$$

$$12 \times 10^{-1}$$

1.2 ACTUALLY 1.2×10^0
 $10^0 = 1$

(EX) 80000 ÷ 200

$$\frac{8 \times 10^4}{2 \times 10^2} = \frac{8}{2} \cdot 10^{4-2}$$

$$= 4 \times 10^2 \quad \text{or} \quad 400$$

Ex 4
Pg 427

$$(5 \times 10^{-8})(2.9 \times 10^2)$$

$$14.5 \times 10^{-6}$$

CAREFUL

ONE PLACE SMALLER ONE PLACE BIGGER?

$$1.45 \times 10^{-5}$$

=

145
ONE place to get to .145
⇒ ADD 4 zeros in front

$$.0000145$$

$$\textcircled{\text{EX}} \frac{1 \times 10^{12}}{2 \times 10^6} = .5 \times 10^6$$
$$= 5 \times 10^5$$

Homework: ① Read Ch. 8-3

② Pg. 428 #1, 2, 26-29, 30-40 even,
429 # 44, 45, 51