# BRING YOUR TEXTBOOK!!!!! 

Created by Mr. Lischwe

## Warmup $1 /\left(\mathbf{2 4 0} \times \mathbf{1 0}^{\mathbf{- 1}}\right)$

- Solve each equation.

1) $19-5 x=12-5 x$
2) $4 x+10=4 x+18+3 x$
3) $2(3 x+10)=20$

## Collec† Warmups

## Going over the quiz

- Retake deadline: 2 weeks from today
- Turn in corrections/extra practice the day before the deadline (I recommend earlier)
- No tasks, must retake whole quiz


## P. 55 (1-7, 13)

1) 3,160
2) 0.00011
3) 0.0000252
4) $4.3 \times 10^{4}$
5) $7.2 \times 10^{-3}$
6) $9.01 \times 10^{-5}$
7) Arctic, Southern, Indian, Atlantic, Pacific
8) $<$
9) $<$
10) Sample answer:
$1.2 \times 10^{6}$ is closer because it is equal to $1,200,000$, and 1.2 x $10^{5}$ is only equal to 120,000 , which is much farther away from one million.

## DISCUSS:

## $2.849 \times 10^{45}$

1. When written in standard notation, how many total digits will this number have?
2. How many zeroes will it have?

Which number is bigger...
$9 \times 10^{5} \quad 900,000$

## or

$2 \times 10^{8}$ ?
20,000,000

## Which number is bigger...

## $8.7654321 \times 10^{3} 8,765.4321$

## or

$1.23456 \times 10^{4}$ ?

## 12,345.6

## Which number is bigger... $2.4 \times 10^{3} \quad 2400$

## $8 \times 10^{3}$ ?

 8000
## Which number is bigger... $\times 10^{-4}$ or $7 \times 10^{-5}$ ? $.0008>.00007$

## Which is bigger?

$6.2 \times 10^{-3}$ or 0.00098 ? $.0062>.00098$

Which number is bigger... $953 \times 10^{4} \quad 9,530,000$ or
$6 \times 10^{5} ? \quad 600,000$

- The size of big numbers is largely determined by how many digits it has.
- Every time you multiply by 10 , you add a digit to a number.
- As long as your "a" number is between 1 and 10 , the exponent will always tell you which number is bigger!


# Which number is bigger? 

- 8700000000000000000000000000000000000 000000000000000000000000000000000000 000000000000000000000000000000000000

$8.7 \times 10^{107}$

-125000000000000000000000 000000000000000000000000 000000000000000000000000 000000000000000000000000

$$
1.25 \times 10^{95}
$$

## Put these numbers in

 INCREASING order:$03.2 \times 10^{4}$
$6.15 \times 10^{2}$
$02.8 \times 10^{3}$
$2.8 \times 10^{3}$
$08 \times 10^{3}$
$8 \times 10^{3}$
$06.15 \times 10^{2}$
$3.2 \times 10^{4}$

## Put these numbers in

 INCREASING order:A. $6 \times 10^{45}$
B. $2.84 \times 10^{45}$
C. $9 \times 10^{43}$
D. $1.6 \times 10^{46}$
$9 \times 10^{43}$
$2.84 \times 10^{45}$
$6 \times 10^{45}$
$1.6 \times 10^{46}$

## How big of a difference is

 this???$010^{24}$ and 10-16

A video that shows the power of scientific notation...

- Powers of ten video


## How big of a difference is

 this???$010^{24}$ and 10-16

## HOMEWORK: p. 57 (24, 25, 26)

