CASAS C/D

#7

$$2608(1 + 0.006)^{N}$$

$N = 2035 - 1990 = 45$

$N = 45$

$2608(1 + 0.006)^{45}$

$2608(1.006)^{45}$

$2608(1.3089)$

3413.6

$(1.006)^{45} = 1.3089$

Topics to Review

* Exponents
* Order of operations "PEMDAS"
* Multiplication notation

	1×3	$X \times Y$
	$1 \cdot 3$	$X \cdot Y$
*	$1(3)$	$X(Y)$
		XY

* Scientific calculator (EE assignment)

Example

$260(3 + 1.05)^{N}$

year 2021?

N - # of years after the year 1990

- Solve for N: $2021 - 1990 = 31$
- Plug in N into formula: $260(3 + 1.05)^{31}$

$260(4.05)^{31} = 1.762 \times 10^{21}$

$= 1.76....$

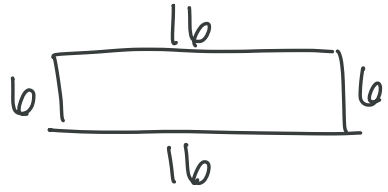
$= 1.762e21$

(17) Surface Area of a rectangular prism?

→ Total area of all surfaces

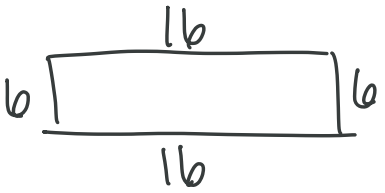
- Filled in missing lengths
  (recognize)
- # of sides = 6
  # of surfaces
  (front, back, top, bottom, side #1, side #2)

Front



Area = L · W
= 16 · 6
= 96

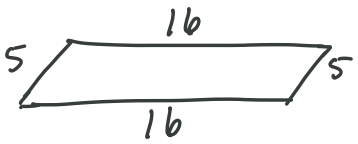
Back



Area = L · W
= 16 · 6
= 96

Front + Back
96 + 96 or 2 · 96 } 192

Top



Area = 16 · 5
= 80

Top + bottom
80 + 80 or 80 · 2 } 160

* 3D Shapes
-Names and properties

* Area of a square or rectangle

2 x 2 = 4 cm
length times width
OR base times height

A = L x W , B x H = A
A = LW , BH = A

Side #1: $A = 5 \cdot 6 = 30$

Side #1 & #2
$60 = 30 \times 2$

$SA = 192 + 160 + 60 = 412$

SA: Sum of area of <u>each</u> side
- Calculate area of each surface and add it up!

(#16) Temperature T at 9:00AM increased by 10° F at 12:00pm (noon). At 6:00pm, the temp. was half the temp. at noon. Which expression gives the temp. at 6:00 pm?

* Creating an expression from a word problem

$9_{AM} = T$

$12_{pm} = T + 10$

* $6_{pm} = \frac{T+10}{2} = \frac{1}{2}(T+10) = (T+10)\frac{1}{2} = \frac{(T+10)}{2}$

$= (T+10)/2 = (T+10) \div 2$