2/22 Algebra I - Downing

7.1 - 7.3 Reflections

7.1 → $-16t^2 + V_0 t + S_0$ → height of a falling object

- $-16t^2$: gravity
- $V_0 t$: initial velocity
- S_0: initial height

t = time in seconds

Go over HW problems

Ex) Write a polynomial with this info: $V_0 = -45$ ft/sec, $S_0 = 200$ ft.

a) $-16t^2 - 45t + 200$

b) $-16(1)^2 - 45(1) + 200 = 139$ feet (plug in 1 sec)

Ex) $V_0 = 16$ ft/sec, $S_0 = 3$ ft.

a) $-16t^2 + 16t + 3$

b) $-16(1)^2 + 16(1) + 3 = 3$ feet

Ex) $-16t^2 + 98$ and $-16t^2 + 46t + 6$ find the distance between

$(-16t^2 + 98) - (-16t^2 + 46t + 6)$

$= -16t^2 + 98 + 16t^2 - 46t - 6$

$\boxed{-46t + 92}$

constant term = 92

they started = 92 feet apart

coefficient = -46

become = 46 ft/sec closer.

Ex) 

Find Area = lw or $b \cdot h$

$(x+5)(2x-9) = 2x^2 - 9x + 10x - 45$

$\boxed{2x^2 + x - 45}$

Ex) Find Perimeter $x+5 + 2x-9 + x+5 + 2x-9 = \boxed{6x-8}$

or $2(x+5) + 2(2x-9)$

Check HW Quizzes

PC