Before we begin, are there any questions from last day's work?

Today's Learning Goal(s):

By the end of the class, I will be able to:

a) consolidate understanding of quadratic relations and be prepared for the unit summative.

Today's plan: **Return and correct SWYK 4.1**

Correct yesterday's homework

pp. 202 #3 to 6 4, 6

Math Contest??

Today's work:

pp. 204-205 #1, 3, 5a, 9, 10b

Check some homework

Review Graphic Organizer: a, h, and k

Review Anchor Chart from 4.4_1 (Day1), for Domain and Range.

(See next slide)

Review Day 1

MPM 2DI Unit 4 Quadratic Relations Review Questions

Read my additional instructions per questions where applicable.

p. 202 #3-6

Only do these ones:

#3

#4 The independent variable is time. For part a) you must create a TABLE OF VALUES (for t = 0 to t = 80). Count by 10s for time.

#5

#6 ***See below.*** Do not sketch any of the curves.
You may fill in the values using the table at the bottom of this page.

p. 202 #6. The first one is done for you.

	a)	b)	c)	d)
Property	$y=(x-1)^2-4$	$y=2(x+3)^2+1$	$y=\frac{1}{4}(x-5)^2+1$	$y=-(x+2)^2+6$
Vertex	(1, –4)			
(Equation of the) Axis of Symmetry	x = 1			
Stretch or compression factor relative to $y=x^2$	Neither since the factor is a = 1			
Direction of opening	Up			
Values x may take (called Domain)	$\{x \in \mathbf{R}\}$			
Values y may take (called Range)	$\{y \in \mathbf{R} / y \geq -4\}$			

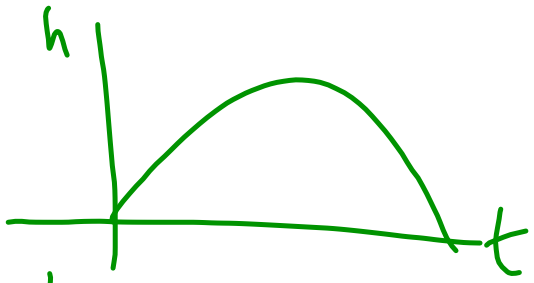
p.202 #4

t	h
0	0
10	1750
20	3000
30	3750
40	4000
50	3750
60	3000
70	1750
80	0

$h = -2.5t^2 + 200t$

$= -2.5(20)^2 + 200(20)$

a)



b) it takes 80 min to fly from TO to Mtrl.

c) the max. height is 4000m and occurs when $t = 40$ min.

Review Day 2 pp. 204-205 PRACTICE TEST

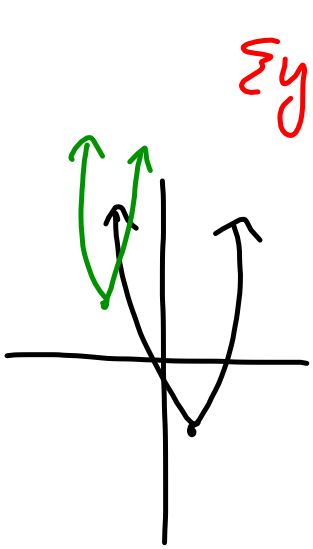
Treat this as a real test.
Do all questions in a maximum of 25 minutes, *then* check your answers with the back.
Only do these ones:

#1 Do a **GRAPH** (not a sketch) for all of them.
Be VERY aware of the ordered pairs required to display in the final graph especially for question c)
#3* each question in #3 is worth 3 or 4 marks;
#5a* explain your answer
#9
10b

Note: There is an additional OPTIONAL review sheet posted on the class webpage.
There is a second file right below it, which has the answers.

p. 202 #6.

Relation: →	$a)\ y=(x-1)^2-4$	$b)\ y=2(x+3)^2+1$	$c)\ y=\frac{1}{4}(x-5)^2+1$	$d)\ y=-(x+2)^2+6$
Property: ↓				
Vertex	(1, -4)	(-3, 1)	(5, 1)	(-2, 6)
(Equation of the) Axis of Symmetry	$x=1$	$x=-3$	$x=5$	$x=-2$
Stretch or compression factor relave to y= x^2	Neither, since the factor is a=1	Stretched by a factor of 2	compressed by a factor of $\frac{1}{4}$	neither
Direction of opening	Up	up	up	down
Values x may take (called **Domain**)	$\{x \in R\}$	$\{x \in \mathbb{R}\}$	$\{x \in \mathbb{R}\}$	$\{x \in \mathbb{R}\}$
Values y may take (called **Range**)	$\{y \in R / y \geq -4\}$	$\{y \in \mathbb{R} \mid y \geq 1\}$	$\{y \in \mathbb{R} \mid y \geq 1\}$	$\{y \in \mathbb{R} \mid y \leq 6\}$



$\{y \in \mathbb{R} \mid y \geq 6\}$

$y \leq 6$