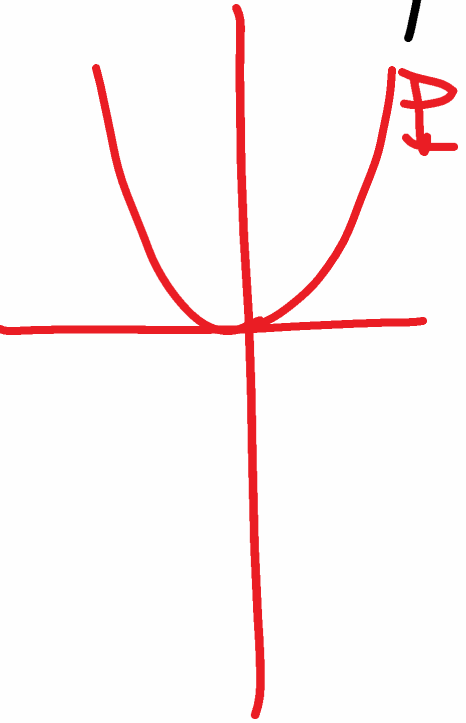


ASSIGNMENT 5

pg 48 5)



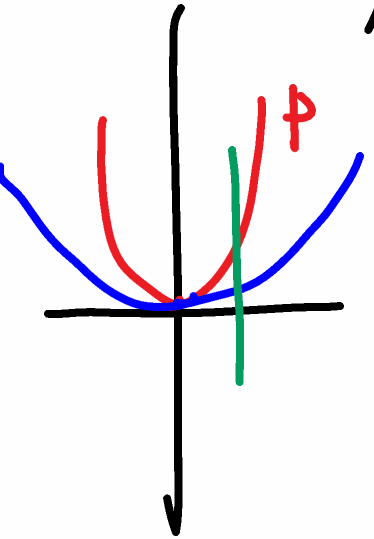
Consider a parabola P that is congruent to $y=x^2$ with vertex $(0,0)$. Find the equation of a new parabola that results if P is

- c) translated 2 units to the right & reflected in the x-axis

$$y = -(x-2)^2$$

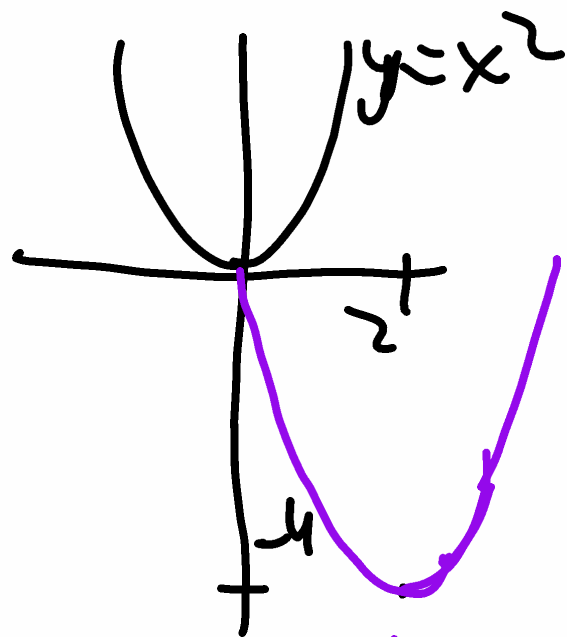
A red arrow points from the underlined text "translated 2 units to the right" to the $(x-2)$ term in the equation. Another red arrow points from the underlined text "reflected in the x-axis" to the negative sign in front of the equation.

d) Compressed vertically by 3 units, reflected in the x-axis & translated 2 units up



$$y = -\frac{1}{3}x^2 + 2$$

6) Consider a parabola P congruent with $y=x^2$ w/ vertex on $(2, -4)$. Find the equation that results if



$$P: y = (x-2)^2 - 4$$

- a) translated 2 units down: $y = (x-2)^2 - 6$
- b) translated 4 units left: $y = (x+2)^2 - 4$
- c) translated 2 units left & 3 up: $y = x^2 - 1$
- d) translated 3 right, 1 down: $y = (x-5)^2 - 5$

$$h=2$$

$$k=-4$$

HOMEWORK FOR THU 13 Dec 2018

pag 49 Exercise 7