

ASSIGNMENT

Base Quadratic $y = x^2$

Tue 4 Dec 2018

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1)

a) $y = -(x-2)^2 - 3$

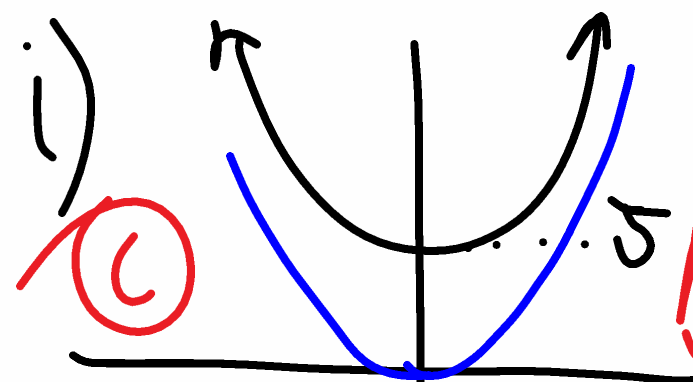
b) $y = -0.5x^2 - 4$

c) $y = x^2 + 5$

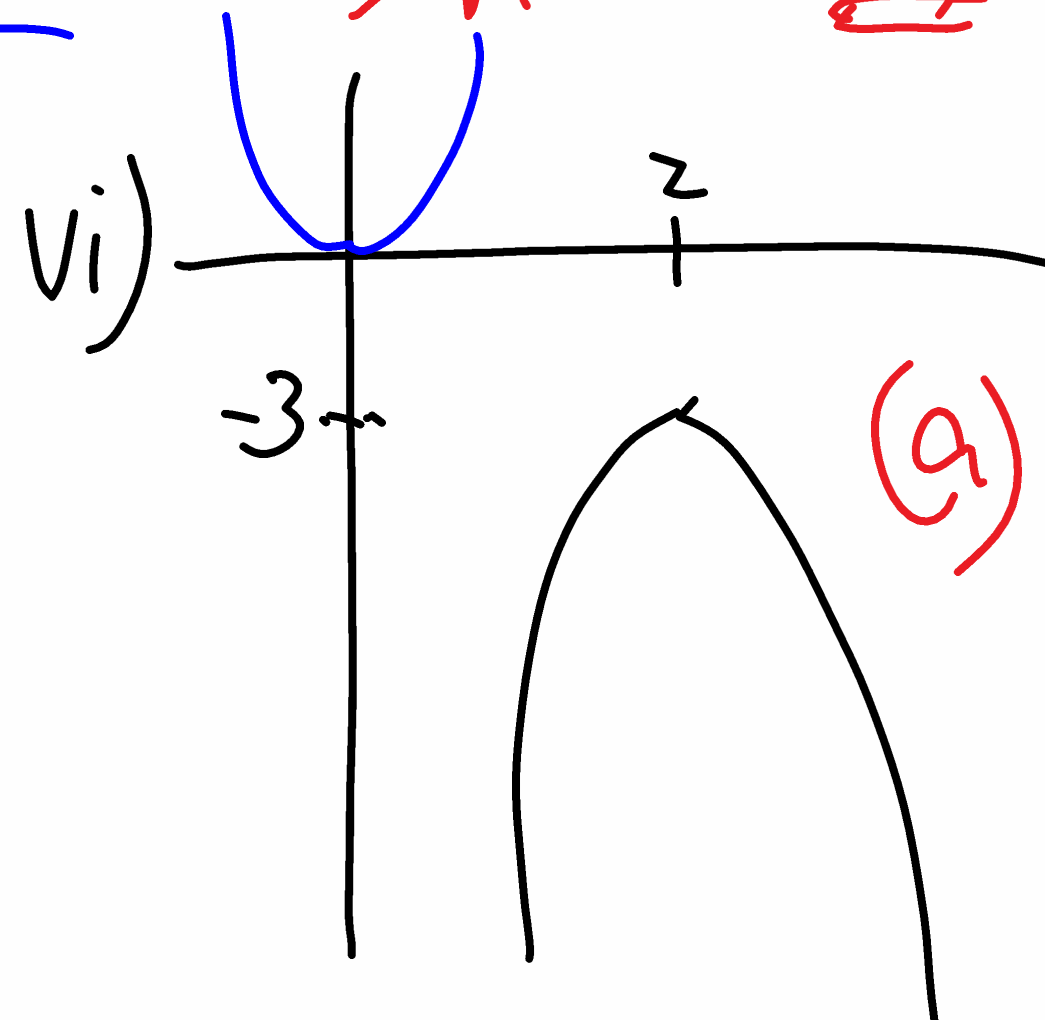
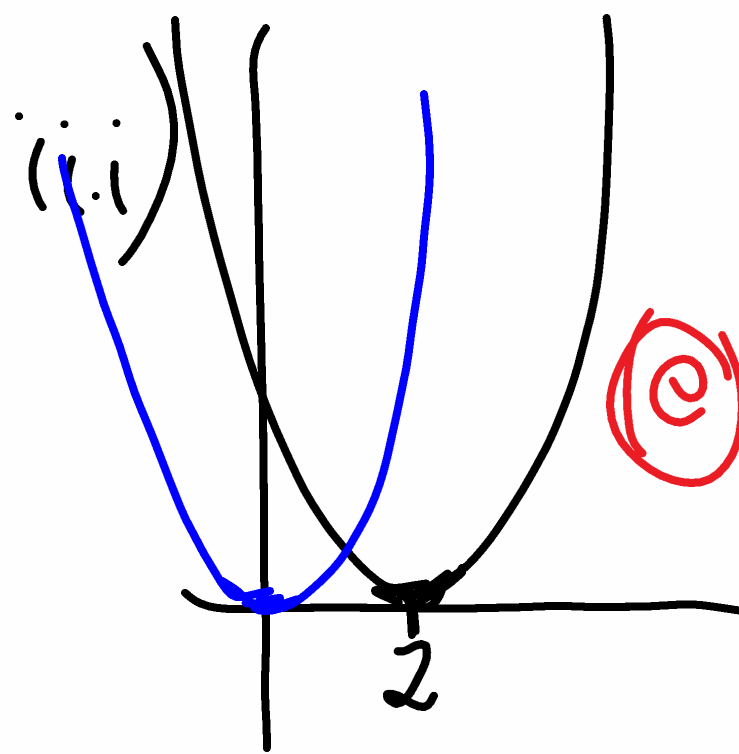
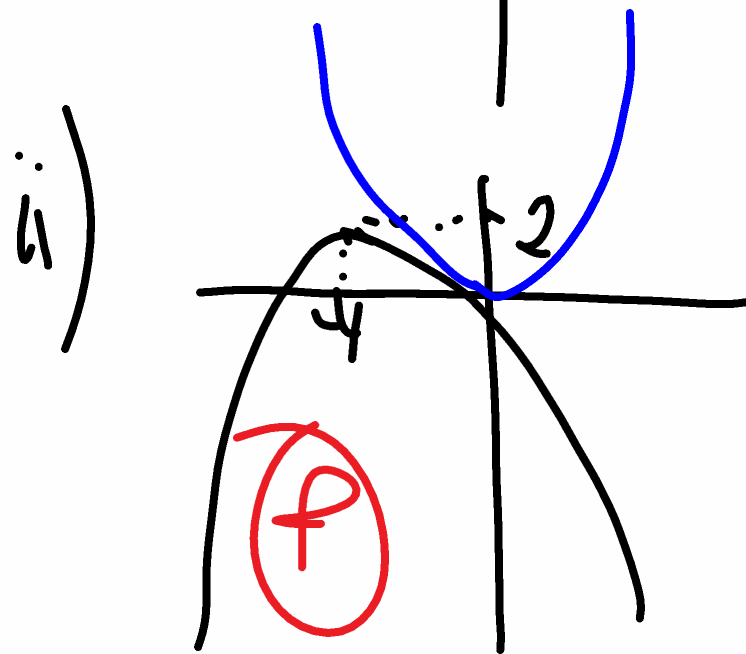
d) $y = 2(x+2)^2$

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

f) $y = -\frac{1}{3}(x+4)^2 + 2$



vertical translation $\Rightarrow k = 5 \Rightarrow$ Ans is c
by 5 units



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2)

i) identify a, h, k

ii) identify transformation

iii) use transformation to graph

iv) check w/ a table of values or Geogebra

Base Quadratic: $f(x) = x^2$

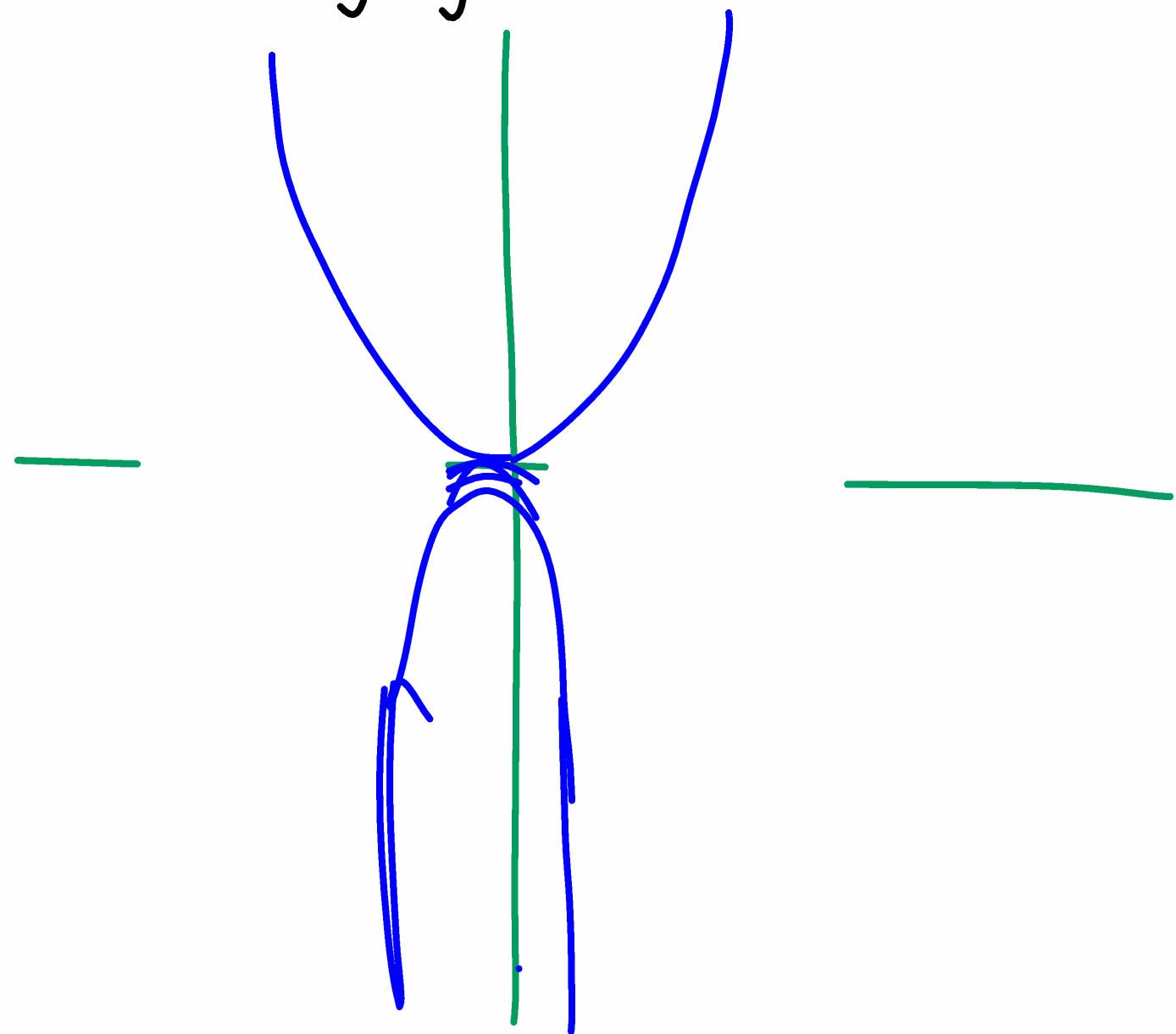
q) $f(x) = -3x^2$

$a = -3$

$h = 0$

$k = 0$

Involves
2 transformations
- Reflection along x-axis
- "It gets narrower"



$$b) f(x) = (x+3)^2 - 2$$

$$a = 1$$

$$h = -3$$

$$x - (-3) = x + 3$$

$$k = -2$$

Involves

- horizontal translation 3 to left

- vert. translation 2 units down

