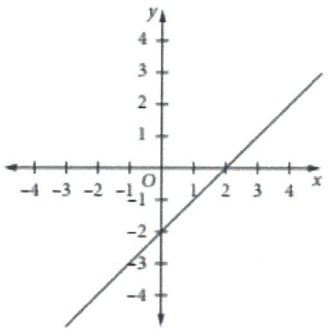
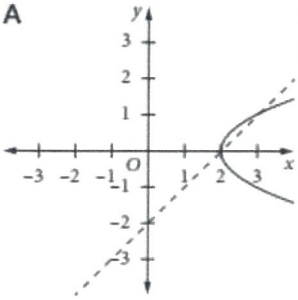
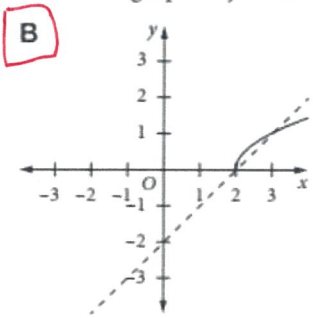
SQUARE ROOT FUNCTIONS

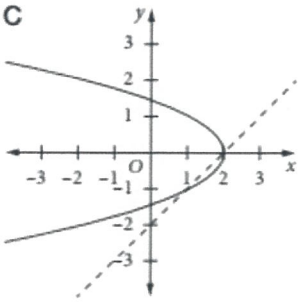
1 The graph of $y = x - 2$ is shown.

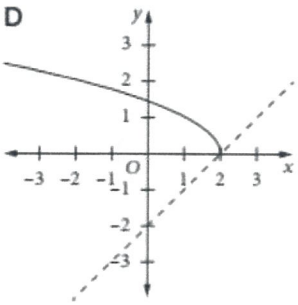


Which of the following represents the graph of $y = \sqrt{x-2}$?

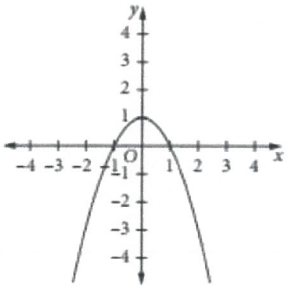
A 

B 

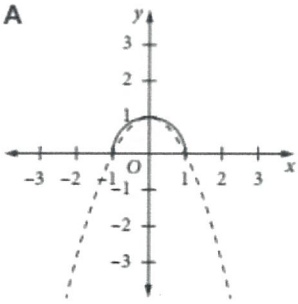
C 

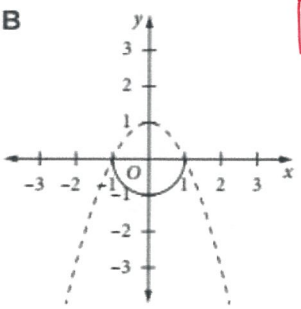
D 

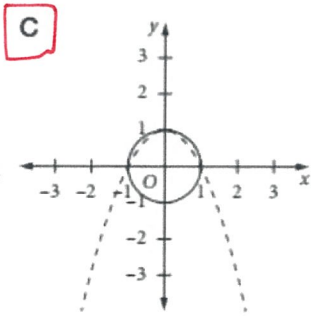
2 The graph of $y = 1 - x^2$ is shown.

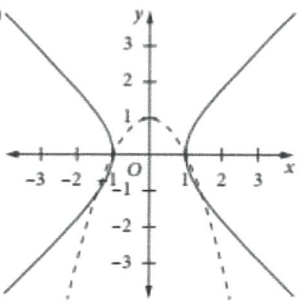


Which of the following represents the graph of $y^2 = 1 - x^2$?

A 

B 

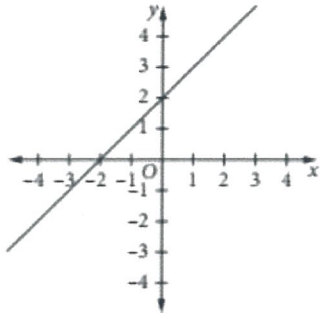
C 

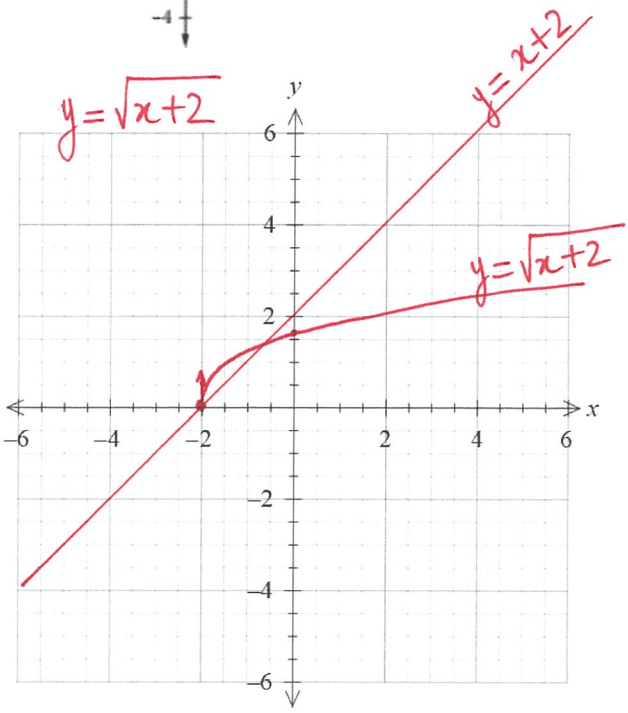
D 

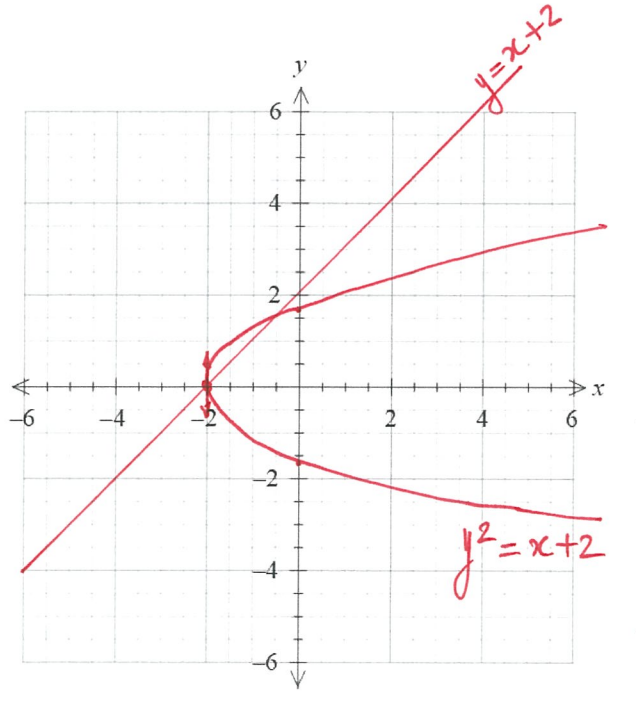
SQUARE ROOT FUNCTIONS

4 Given the graph of $y = x + 2$, draw:

(a) $y = \sqrt{x+2}$ **(b)** $y^2 = x + 2$

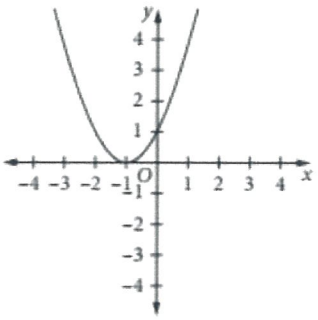


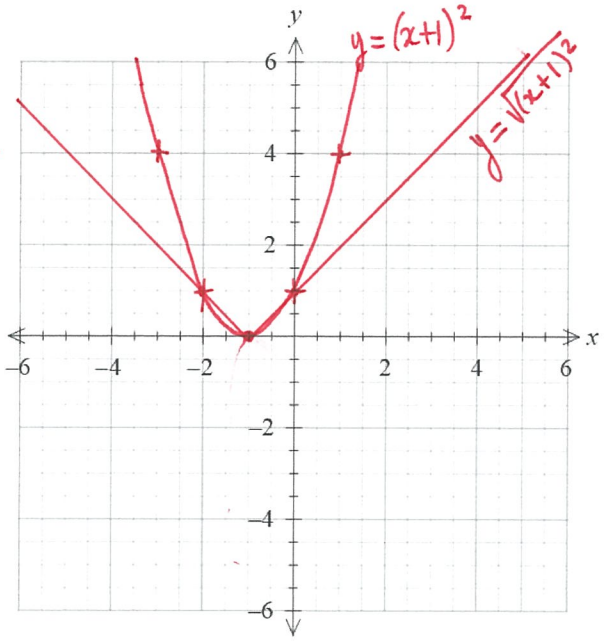


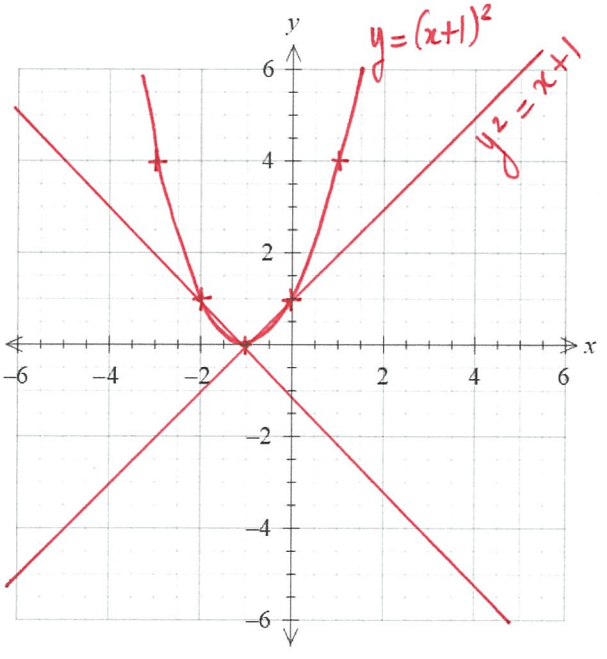


5 Given the graph of $y = (x + 1)^2$, draw:

(a) $y = \sqrt{(x+1)^2}$ **(b)** $y^2 = x + 1$



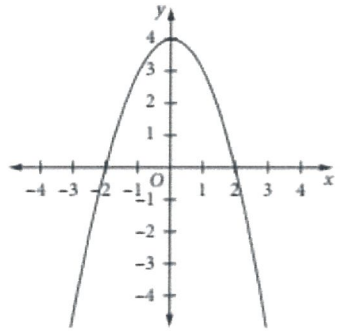




SQUARE ROOT FUNCTIONS

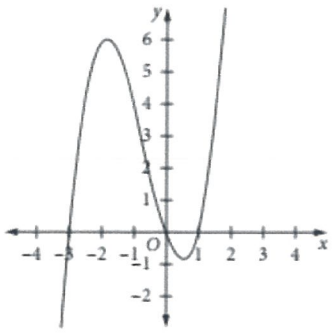
6 Given the graph of $y = (x+2)(2-x)$, draw:

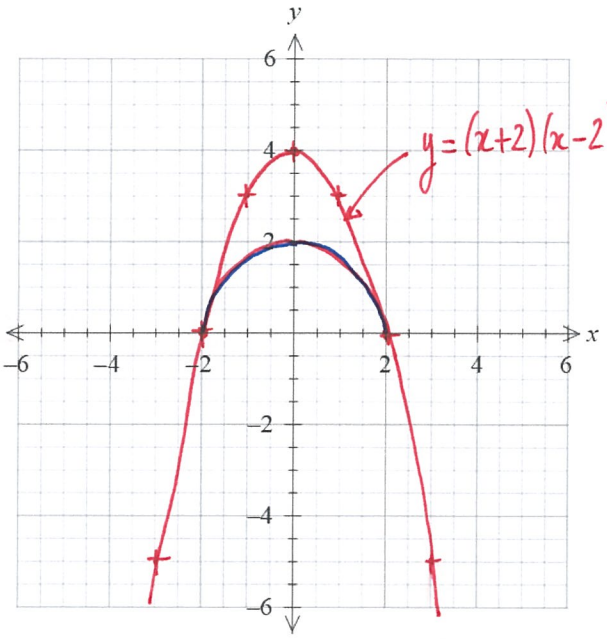
(a) $y = \sqrt{(x+2)(2-x)}$ (b) $y^2 = (x+2)(2-x)$

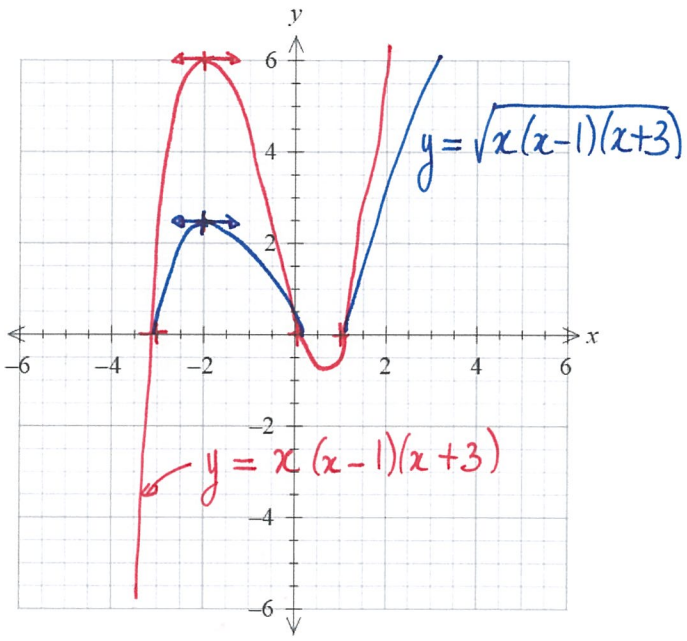


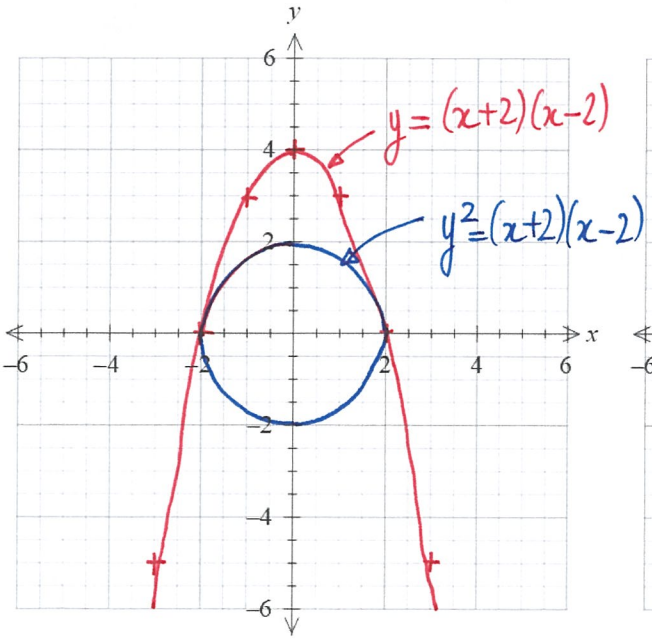
7 Given the graph of $y = x(x-1)(x+3)$, draw:

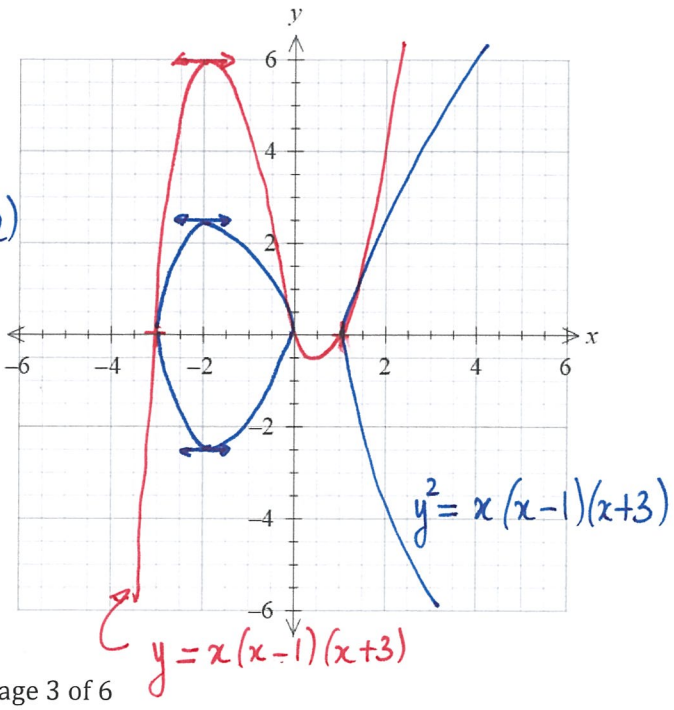
(a) $y = \sqrt{x(x-1)(x+3)}$ (b) $y^2 = x(x-1)(x+3)$







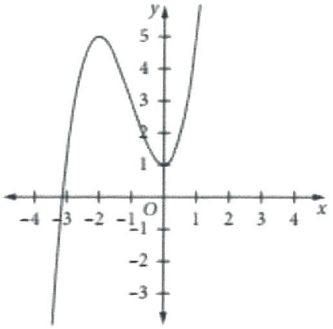




SQUARE ROOT FUNCTIONS

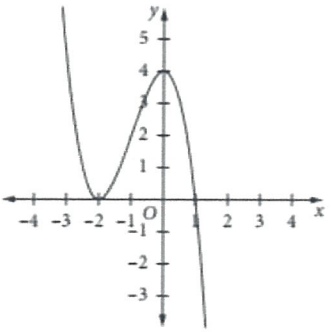
8 Given the graph of $y = x^3 + 3x^2 + 1$, draw:

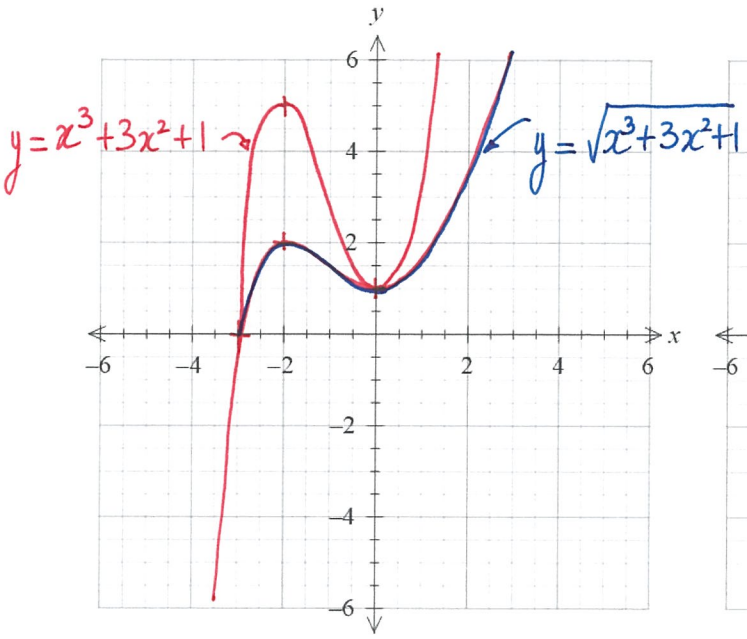
(a) $y = \sqrt{x^3 + 3x^2 + 1}$ (b) $y^2 = x^3 + 3x^2 + 1$

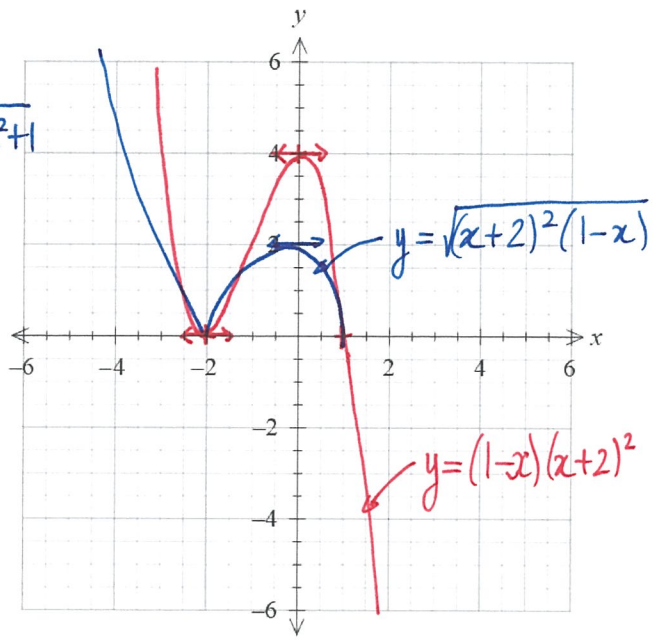


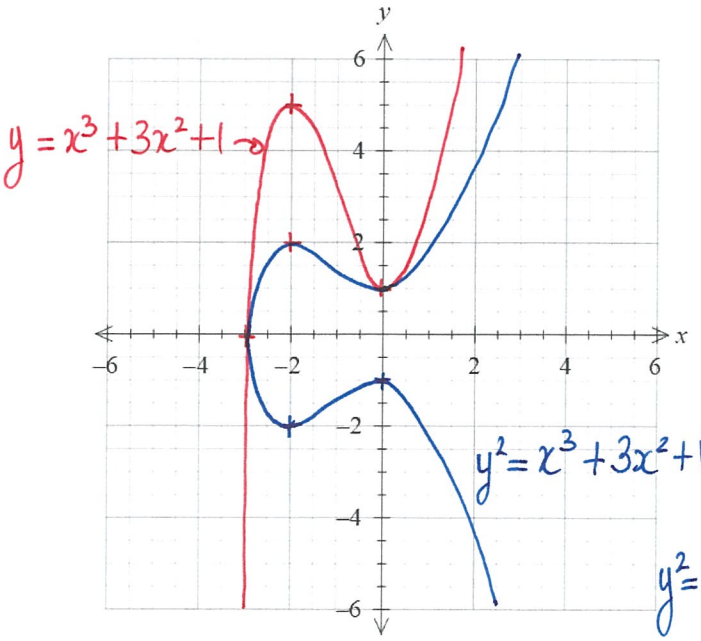
9 Given the graph of $y = (1 - x)(x + 2)^2$, draw:

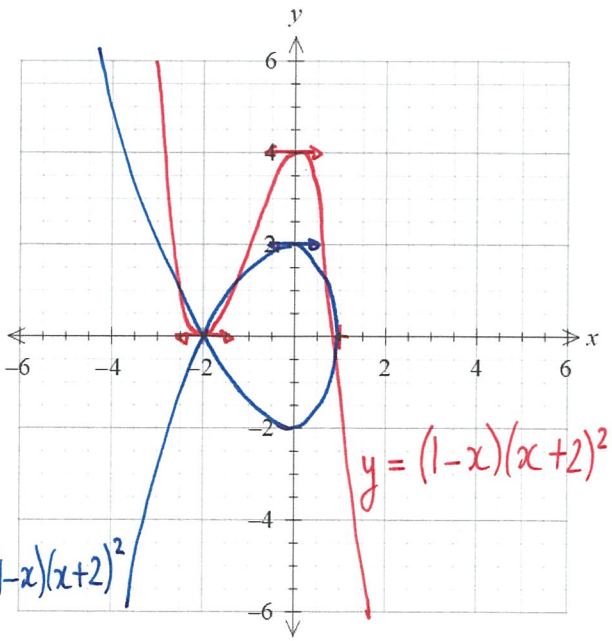
(a) $y = \sqrt{(1 - x)(x + 2)^2}$ (b) $y^2 = (1 - x)(x + 2)^2$







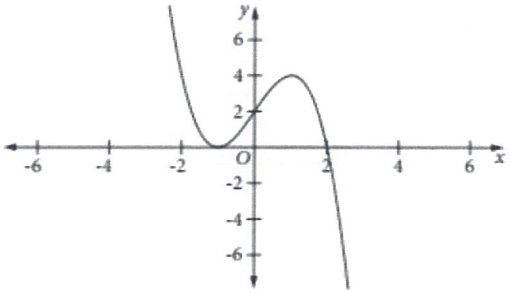




SQUARE ROOT FUNCTIONS

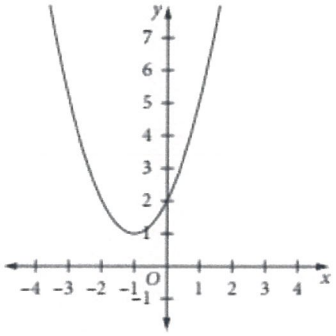
10 Given the graph of $y = 2 + 3x - x^3$, draw:

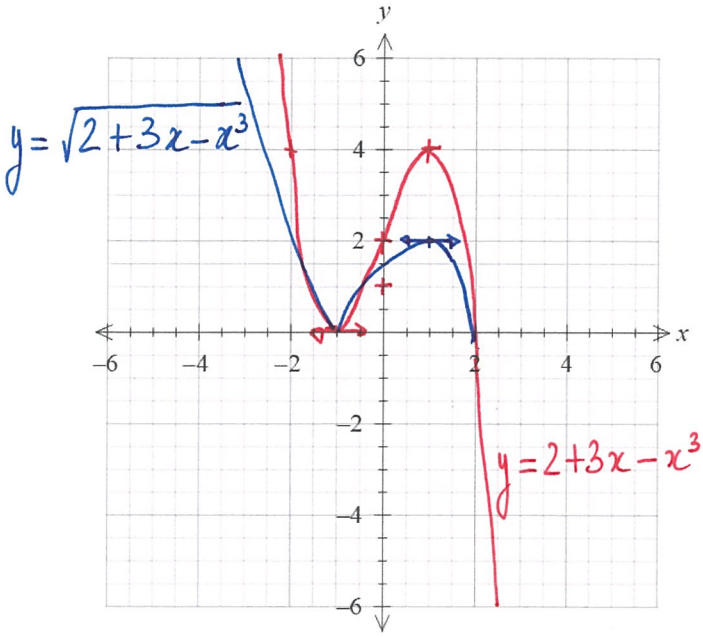
(a) $y = \sqrt{2 + 3x - x^3}$ **(b)** $y^2 = 2 + 3x - x^3$

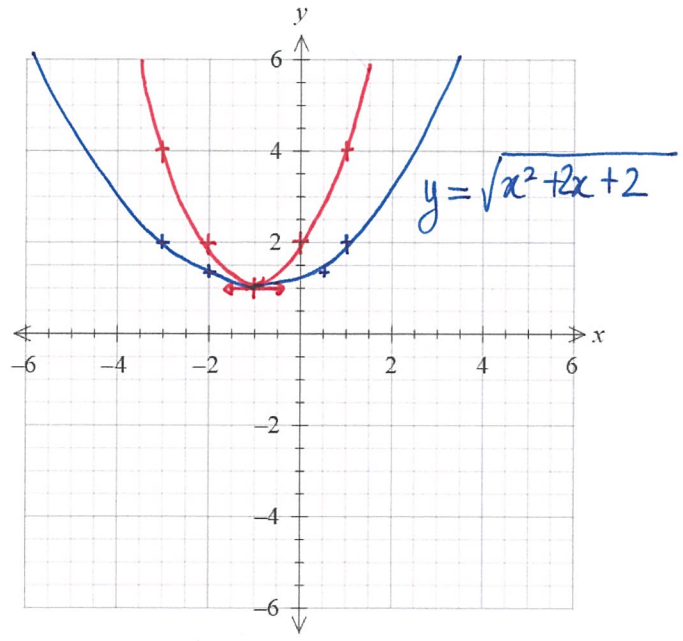


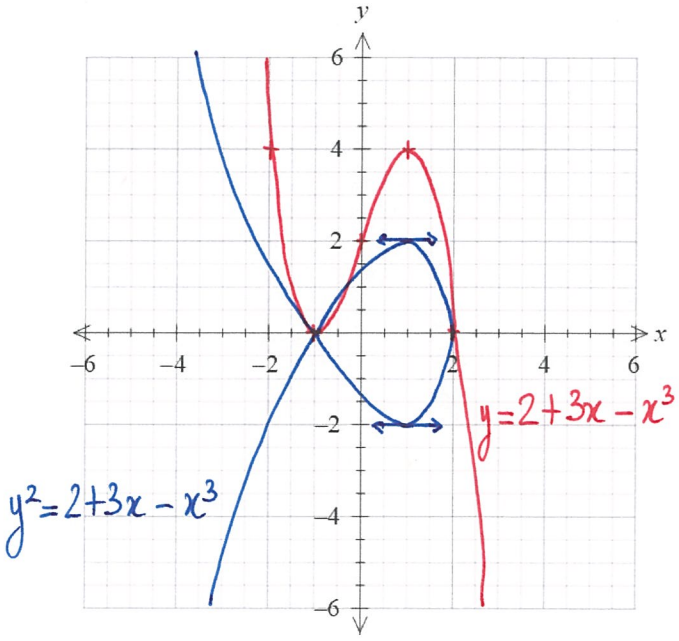
11 Given the graph of $y = x^2 + 2x + 2$, draw:

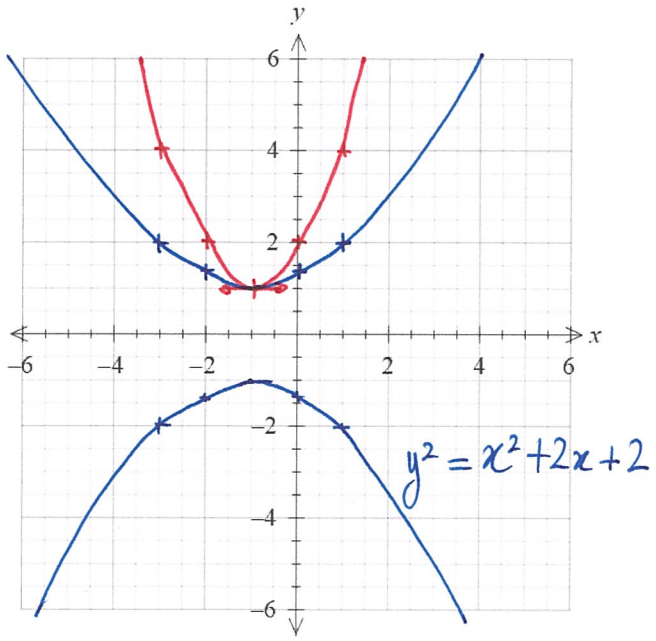
(a) $y = \sqrt{x^2 + 2x + 2}$ **(b)** $y^2 = x^2 + 2x + 2$









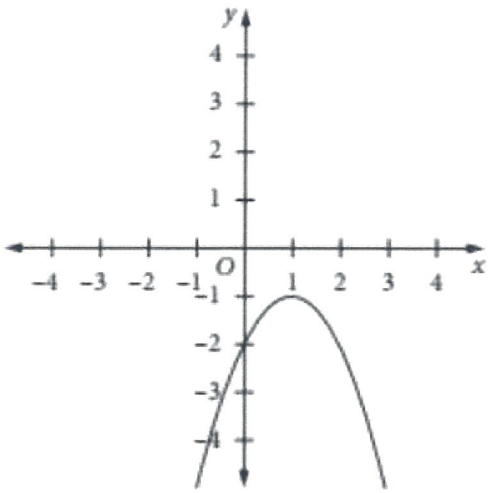


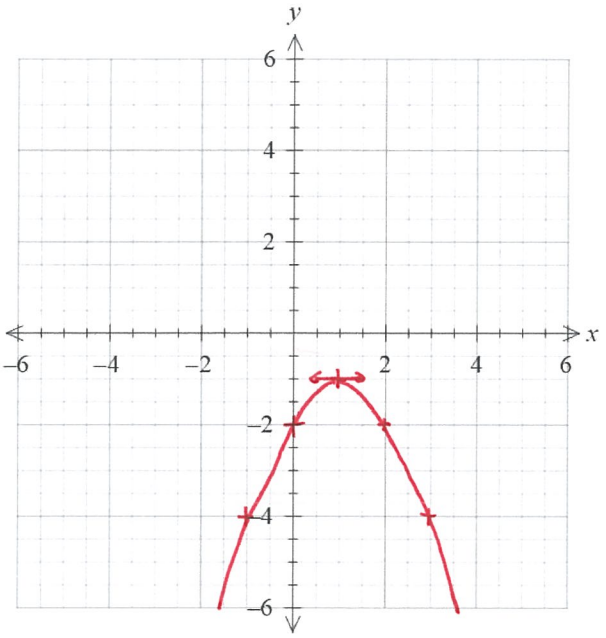
SQUARE ROOT FUNCTIONS

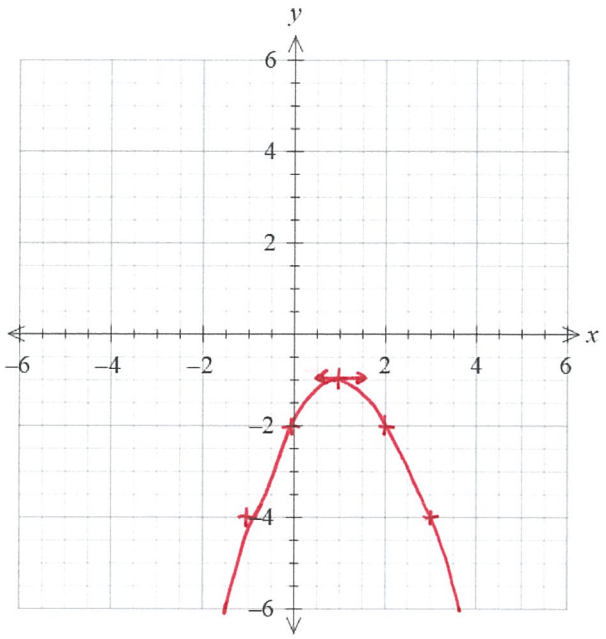
12 Given the graph of $y = -x^2 + 2x - 2$, draw:

(a) $y = \sqrt{-x^2 + 2x - 2}$

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







We cannot draw $y = \sqrt{-x^2 + 2x - 2}$ as $(-x^2 + 2x - 2)$ is always negative.

we cannot draw as the original function is always negative, so cannot be equal to a positive quantity y^2.