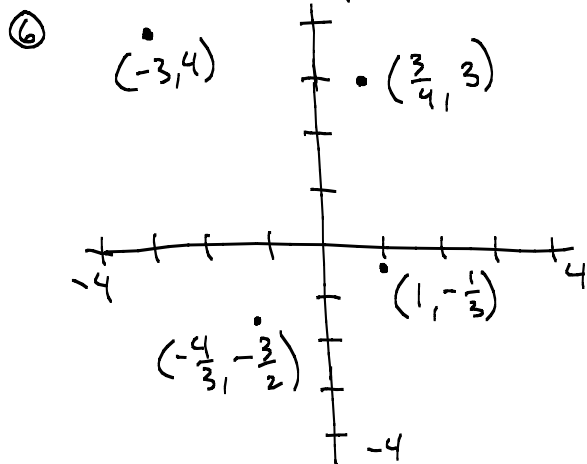


Precalculus Homework Solutions:
 P.3 # 2, 6, 44, 46, 50, 54, 62, 64

- ② A (1.5, -4)
 B (0, -2)
 C (-3, 2.5)
 D (-6, 0)



④④ $y = x^2 - 3x + 2$

(a) if $x = 2$ $y = 2^2 - 3(2) + 2 = 0$ so $(2, 0)$ is on the graph
 (b) if $x = -2$ $y = (-2)^2 - 3(-2) + 2 = 12$ so $(-2, 8)$ is not on the graph

④⑥ $y = \frac{1}{3}x^3 - 2x^2$

(a) if $x = 2$ $y = \frac{1}{3}(2)^3 - 2(2)^2 = \frac{8}{3} - 8 = \frac{8}{3} - \frac{24}{3} = -\frac{16}{3}$ so yes to $(2, -\frac{16}{3})$
 (b) if $x = -3$ $y = \frac{1}{3}(-3)^3 - 2(-3)^2 = -\frac{27}{3} - 18 = -9 - 18 = -27$ so no to $(-3, 9)$

⑤⑥ $y = (x+3)^2$

if $x = 0$ $y = (0+3)^2 = 9$ so $(0, 9)$ is the y-intercept
 if $y = 0$ $0 = (x+3)^2$ $x = -3$ so $(-3, 0)$ is the x-intercept

⑤⑨ $y = \sqrt{2x-1}$

if $x = 0$ $y = \sqrt{2(0)-1} = \sqrt{-1}$ so there is no y-intercept
 if $y = 0$ $0 = \sqrt{2x-1}$ $0^2 = (\sqrt{2x-1})^2$ $0 = 2x-1$ $x = \frac{1}{2}$
 so $(\frac{1}{2}, 0)$ is the only x-intercept

