1. Answer the questions about the functions graphed below.

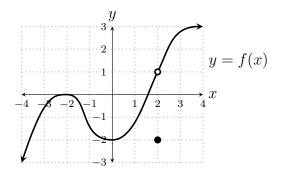


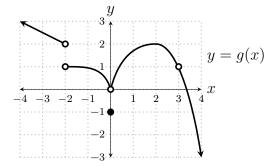
(b) 
$$\lim_{x \to 0} g(x) =$$

(c) 
$$\lim_{x \to 2} f(x)g(x) =$$

(d) 
$$\lim_{x \to -2^+} g(x) =$$

(e) 
$$\lim_{x \to 2} \left( \frac{f(x)}{4 + 2g(x)} \right)^{2/3} =$$





- 2.  $\lim_{x \to -2} (x^2 3x)^2 =$
- 3.  $\lim_{x \to 0} e^x(x^3 + 5x + 3) =$
- 4. Draw the graph of **one** function f, with domain (-4,4), meeting **all** of the following conditions.

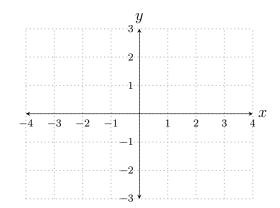
(a) 
$$\lim_{x \to 2^{-}} f(x) = 2$$

(b)  $\lim_{x \to 2^+} f(x) = -1$ 

(c) 
$$f(2) = 1$$

(d) 
$$\lim_{x \to -2} f(x) = 0$$

(e) 
$$f(-2) = 0$$

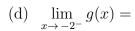


1. Answer the questions about the functions graphed below.

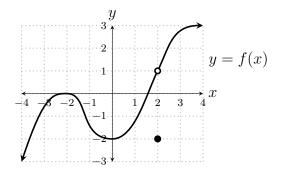


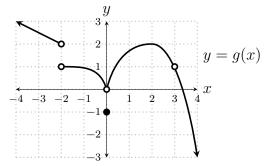
(b) 
$$\lim_{x \to 0} f(x) =$$

(c) 
$$\lim_{x \to 2} \frac{f(x)}{g(x)} =$$



(e) 
$$\lim_{x \to 2} (f(x) + g(x) + 1)^{3/2} =$$





$$2. \quad \lim_{x \to -2} \sqrt{x^2 - 3x + 6} =$$

$$3. \quad \lim_{x \to 3} \left( \frac{1}{x} + \frac{x}{2} \right) =$$

4. Draw the graph of **one** function f, with domain (-4,4), meeting **all** of the following conditions.

(a) 
$$\lim_{x \to -2^-} f(x) = 1$$

(b) 
$$\lim_{x \to -2^+} f(x) = -2$$

(c) 
$$f(-2) = 1$$

(d) 
$$\lim_{x \to 2} f(x) = 0$$

(e) 
$$f(2) = 0$$

