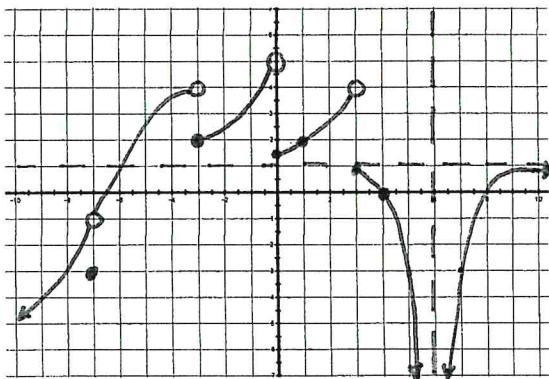
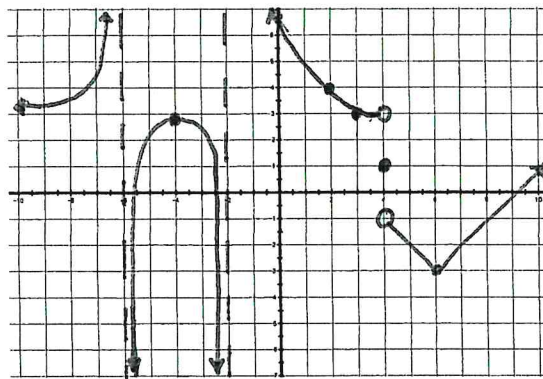


$f(x)$  $g(x)$ 

1. Where is $f(x)$ discontinuous? What kind of discontinuity?

$x = -7$ REMOVABLE

$x = 3$ JUMP N.R.

$x = -3$ JUMP N.R.

$x = 6$ INFINITE N.R.

$x = 0$ JUMP N.R.

2. Where is $g(x)$ discontinuous? What kind of discontinuity?

$x = -6$ INFINITE N.R.

$x = 4$ JUMP N.R.

$x = -2$ INFINITE N.R.

3. $\lim_{x \rightarrow 1} f(x)$

2

4. $\lim_{x \rightarrow 6} f(x)$

$-\infty$

5. $\lim_{x \rightarrow \infty} f(x)$

1

6. Evaluate $f(-7)$

-3

7. $\lim_{x \rightarrow -7} f(x)$

-1

8. Evaluate $g(4)$

1

9. $\lim_{x \rightarrow 4^+} g(x)$

-1

10. $\lim_{x \rightarrow 4^-} g(x)$

3

11. $\lim_{x \rightarrow 4} g(x)$

DNE

12. $\lim_{x \rightarrow -6^-} g(x)$

∞

$$13. \lim_{x \rightarrow -6^+} g(x) \quad -\infty$$

$$14. \lim_{x \rightarrow -6} g(x) \quad DNE$$

$$15. \text{Evaluate } f(3) \quad 1$$

$$16. \lim_{x \rightarrow 3} f(x) \quad DNE$$

$$17. \text{Evaluate } g(2) \quad 4$$

$$18. \lim_{x \rightarrow 2} g(x) \quad 4$$

$$19. \text{Evaluate } f(g(2)).$$

$$g(2) = 4 \quad 0$$

$$f(4) = 0$$

$$20. \text{Evaluate } (fg)(3)$$

$$f(3) = 1 \quad 3$$

$$g(3) = 3$$

$$21. \text{Evaluate } \lim_{x \rightarrow \infty} g(x)$$

$$\infty$$

$$22. \lim_{x \rightarrow -4} (f+g)(x)$$

$$\lim_{x \rightarrow -4} f(x) \approx 3.75 \quad 6.75$$

$$\lim_{x \rightarrow -4} g(x) = 3$$

$$23. \lim_{x \rightarrow -2} (f+g)(x) \quad DNE$$

$$\lim_{x \rightarrow -2} f(x) \approx 2.5$$

$$\lim_{x \rightarrow -2} g(x) \rightarrow -\infty$$

$$24. \text{Evaluate } \lim_{x \rightarrow 2} f(g(x))$$

$$\lim_{x \rightarrow 2} g(x) = 4$$

$$\lim_{x \rightarrow 4} f(x) = 0$$