

MATE 3013 - Parcial 1

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Questions: 20

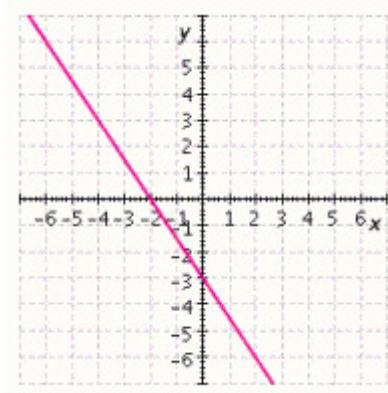
Finish**Save All****Help****1.** (Points: 2.5)**Evalue.**Si $f(x) = -6x^2 + 5x - 4$, encuentre $f(6)$.

- a. -10
- b. -190
- c. -186
- d. -215

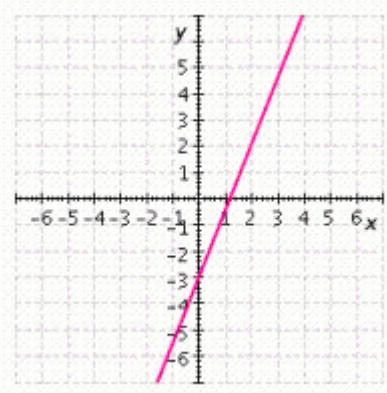
Save Answer**2.** (Points: 2.5)Find the slope and y -intercept of the line and choose the correct graph.

$$3x - 2y = 6$$

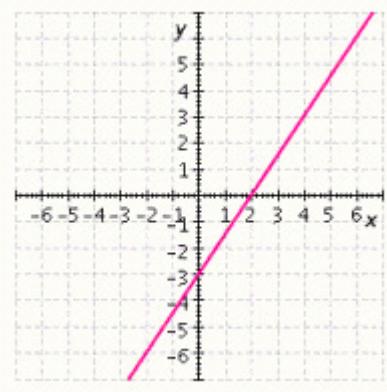
- a. The slope is $-\frac{3}{2}$, and the y -intercept is -3 .



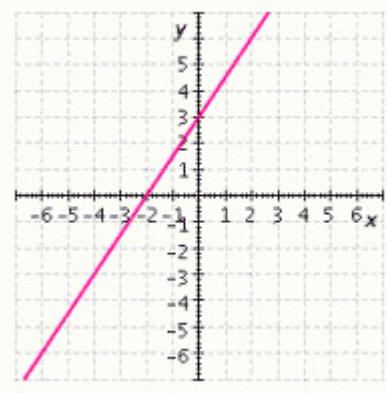
- b. The slope is $\frac{5}{2}$, and the y -intercept is -3 .



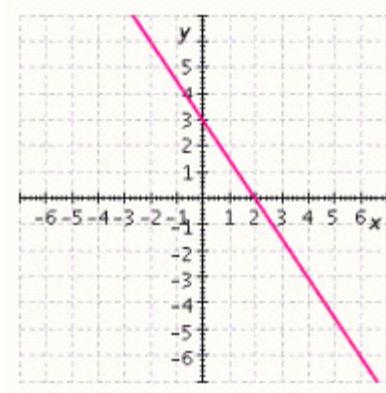
- c. The slope is $\frac{3}{2}$, and the y -intercept is -3 .



- d. The slope is $\frac{3}{2}$, and the y -intercept is 3 .

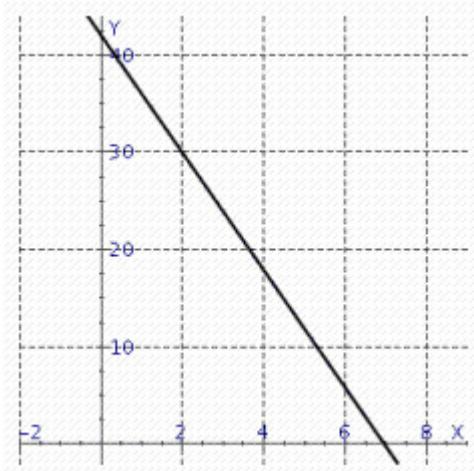


- e. The slope is $-\frac{3}{2}$, and the y -intercept is 3 .



3. (Points: 2.5)

Determine the slope of the line which is sketched below.



- a. $m = -5$
- b. $m = -6$
- c. $m = -11$
- d. $m = -3$
- e. $m = 0$

4. (Points: 2.5)

Determine the correct equation for the line with a slope of 7 and y -intercept of -3 .

a. $y = -\frac{1}{7}x - 3$

b. $y = 7x - 3$

c. $y = -7x + 3$

d. $y = 7x + 3$

e. $y = \frac{1}{7}x - 3$

5. (Points: 2.5)

Determine the correct equation for the line passing through the point $(8, -9)$ and parallel to the line $x + 4y = 12$.

a. $y = 4x + 7$

b. $y = 4x - 7$

c. $y = \frac{1}{4}x + 7$

d. $y = -\frac{1}{4}x - 7$

e. $y = -\frac{1}{4}x - 4$

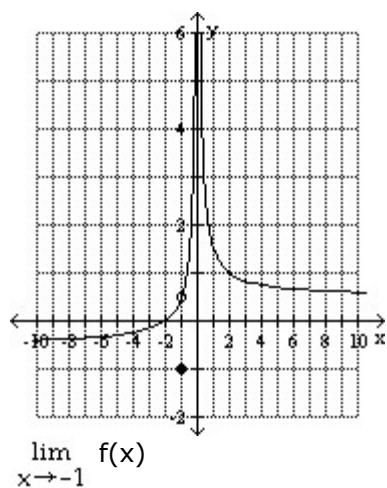
6. (Points: 2.5)

Calcule $46 - (7^{-4})$

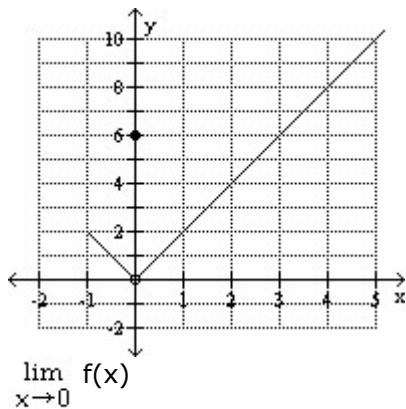
Redondee su resultado a la centésima más cercana. No entre comas ni el signo de dólar.

Answer

7. (Points: 2.5)Calcule el $\log_6(2.0)$.*Nota: Redondée su respuesta a la milésima más cercana (3 lugares a la derecha del punto decimal).***Answer**

8. (Points: 2.5)**Usa la gráfica para calcular el límite.** a. ∞ b. $\frac{1}{2}$ c. $-\frac{1}{2}$ d. -1

9. (Points: 2.5)**Usa la gráfica para calcular el límite.**

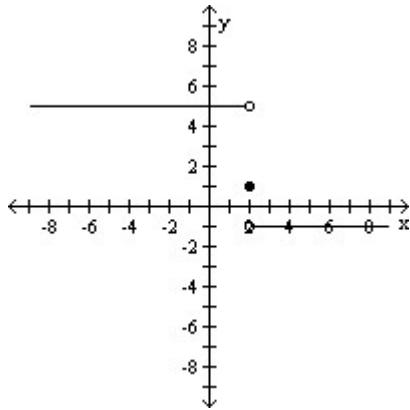


- a. No existe
- b. 6
- c. 0
- d. -1

10.(Points: 2.5)

Use la gráfica de la función para hallar el límite indicado y el valor de la función si existen.

Encuentre $\lim_{x \rightarrow 2^-} f(x)$ y $\lim_{x \rightarrow 2^+} f(x)$.



- a. -1; 5
- b. No existe; No existe
- c. 5; -1

- d. 1; 1

11. (Points: 2.5)

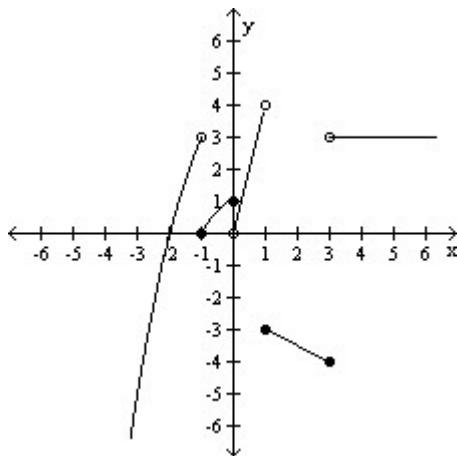
Use GRAPH o su calculadora gráfica para encontrar el límite indicado, graficando la función cerca del punto límite.

$$\lim_{t \rightarrow 3} \frac{t^2 - 9}{\sin(t - 3)}$$

- a. 1
 b. 9
 c. 6
 d. 0

12. (Points: 2.5)

From the graph of f , indicate the intervals on which f is continuous.



- a. $(-\infty, -1), [-1, 0], (0, 1), [1, 3], (3, \infty)$
 b. $(-\infty, -1), (-1, 0), (0, 1), (1, 3), (3, \infty)$
 c. $(-\infty, -1), [-1, 0], [0, 1], [1, 3], (3, \infty)$
 d. $(-\infty, -1), [-1, 3], (3, \infty)$

13.(Points: 2.5)

Encuentre el límite, si existe.

$$\lim_{x \rightarrow 0} (\sqrt{x} - 2)$$

- a. 0
- b. -2
- c. No existe
- d. 2

14.(Points: 2.5)

Encuentre el límite, si existe.

$$\lim_{x \rightarrow 2} (x^3 + 5x^2 - 7x + 1)$$

- a. No existe
- b. 15
- c. 0
- d. 29

15.(Points: 2.5)

Encuentre el límite si existe.

$$\lim_{x \rightarrow 2} (x + 1)^2(x - 3)^3$$

- a. -1

- b. 125
- c. 1125
- d. -9

16.(Points: 2.5)

Encuentre el límite si existe.

$$\lim_{x \rightarrow \frac{1}{2}} 4x \left(x - \frac{3}{5} \right)$$

- a. $\frac{11}{5}$
- b. $-\frac{1}{20}$
- c. $-\frac{2}{5}$
- d. $-\frac{1}{5}$

17.(Points: 2.5)

Encuentre el límite, si existe.

$$\lim_{x \rightarrow 1} \frac{3x^2 + 7x - 2}{3x^2 - 4x - 2}$$

- a. $-\frac{8}{3}$
- b. $-\frac{7}{4}$
- c. No existe
- d. 0

18.(Points: 2.5)**Encuentre el límite, si existe.**

$$\lim_{x \rightarrow 12} \frac{1}{x - 12}$$

- a. 12
- b. 24
- c. No existe
- d. 0

19.(Points: 2.5)**Encuentre el límite, si existe.**

$$\lim_{x \rightarrow 1} \frac{x^4 - 1}{x - 1}$$

- a. 2
- b. No existe
- c. 0
- d. 4

20.(Points: 2.5)**Encuentre el límite, si existe.**

$$\lim_{x \rightarrow 0} \frac{x^3 + 12x^2 - 5x}{5x}$$

- a. 0

- b. 5
- c. No existe
- d. -1

Save Answer

Finish

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Help