

# Unit 1 Quiz - KU

Please complete the Limits Quiz - knowledge and understanding  
Any concerns please send screenshots to your teacher on Teams.  
Good luck!

1 1 point

$$f(x) = x^2 - 2x + 1 \quad x < 5$$
$$f(x) = 3 - x \quad x \geq 5$$

$$\lim_{x \rightarrow 5^+} f(x)$$

2 1 point

Which statements are true for  $f(x) = \sqrt{x+2} + 3$ ?

- ☐ There is one vertical asymptote
- ☐ Neither answers are true
- ☐ There is one horizontal asymptote
- ☐ Domain  $x > 0$
- ☐ Range  $y < 3$

3 1 point

if  $2x - 1 = g(x) = x^2 - 2x + 3$ , then  $\lim_{x \rightarrow 2} g(x) = 3$

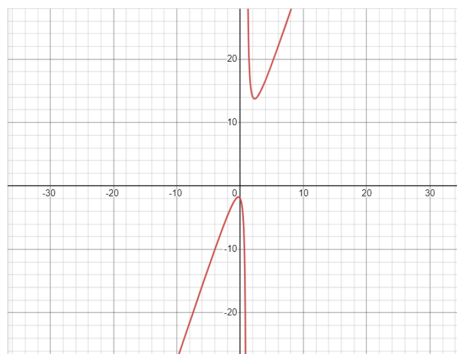
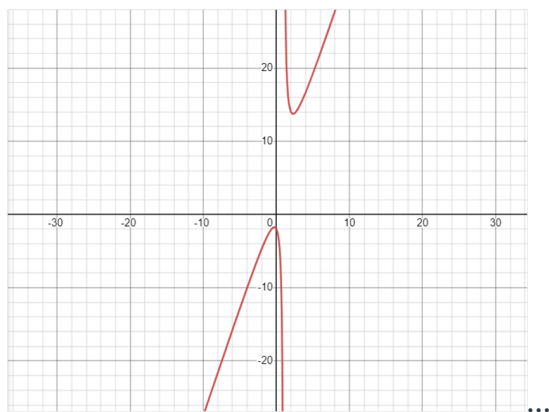
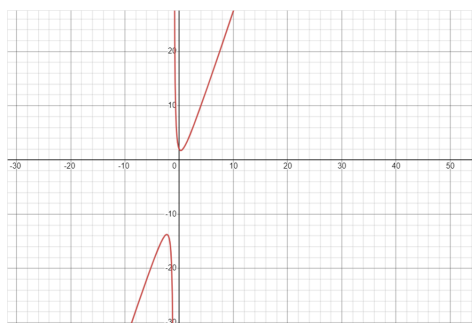
- ☐ True
- ☐ False

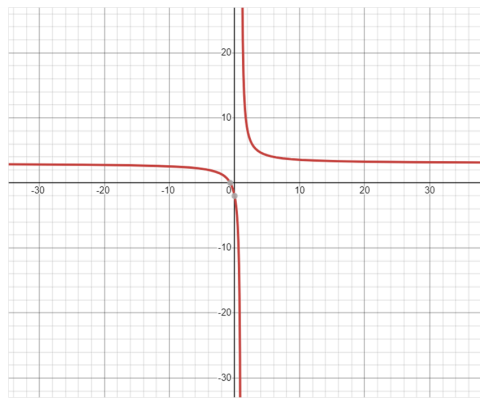
4

1 point

Find the graph for

$$\frac{3x^2+2}{x-1}$$





5 1 point

$$f(x) = 2x+2 \quad x < 1$$

$$f(x) = 2x-4 \quad x \geq 1$$

Find  $\lim_{x \rightarrow 1^-} f(x)$