

PreCalculus Quiz

Your Name:

Construct an example function and graph that has the given characteristics.

1.

horizontal asymptote

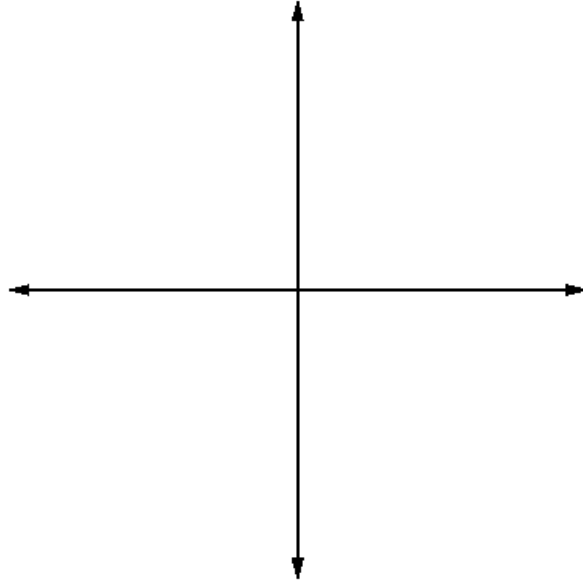
$$y = 0$$

vertical asymptotes

$$x = -2, x = 2$$

zero at

$$0$$



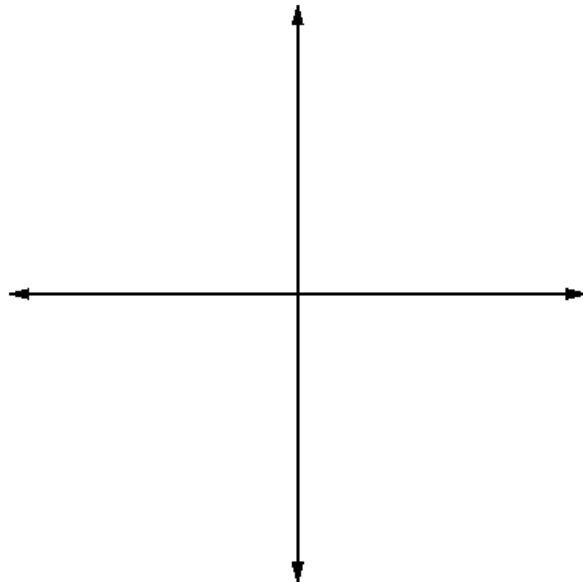
2.

oblique asymptote

$$y = -2x + 3$$

zero at

$$-1$$



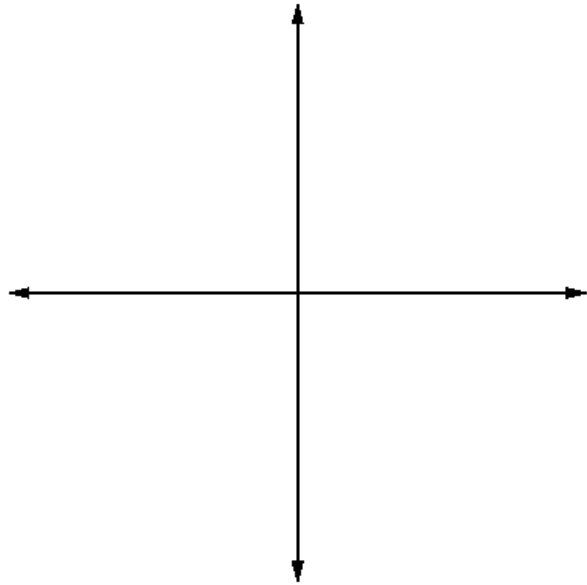
over >>

3.

vertical asymptote
 $x = 1$

zeros at
4

goes through point
 $(2, -3)$



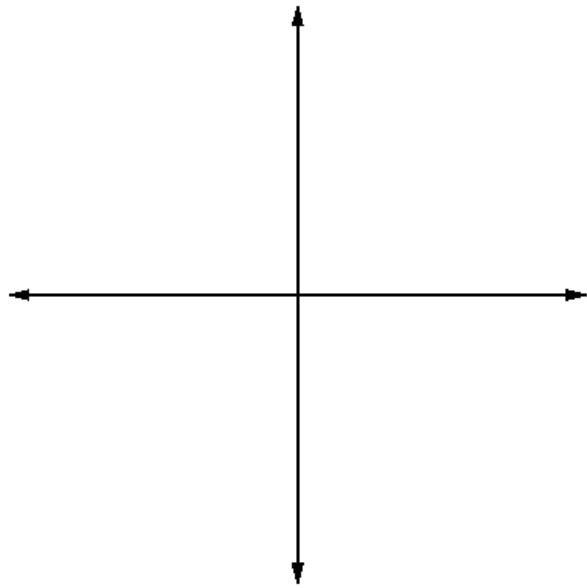
4.

horizontal asymptote
 $y = -5$

vertical asymptotes
 $x = -5$

$x = -2$

$x = 3$



5.

removable discontinuity
at $x = 4$

