

Advanced Algebra with Trig

8.2 Opener (No Calculator!)

Name: *Key*
Period:

1. Find the equation(s) of the asymptote(s) of the functions below. Then state the domain and range.

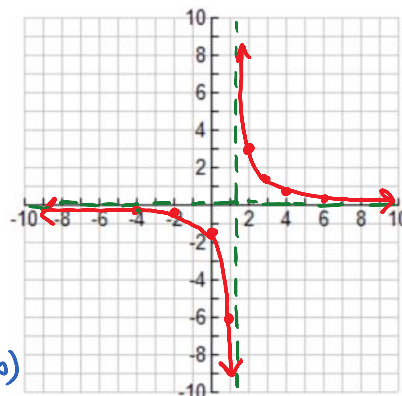
a. $y = \frac{3x+2}{x+10}$

V: $-x+10=0$
 $-x=-10$
 $x=10$

H: $y = \frac{3}{-1}$
 $y = -3$

D: $(-\infty, 10) \cup (10, \infty)$

R: $(-\infty, -3) \cup (-3, \infty)$



x	y
-4	-3/8
-2	-3/5
0	-3/2
1	-6
2	3
4	3/4
6	3/7

b. $y = \frac{6}{3x-4}$

V: $3x-4=0$
 $3x=4$
 $x=4/3$

H: $y = 0$

D: $(-\infty, 4/3) \cup (4/3, \infty)$

R: $(-\infty, 0) \cup (0, \infty)$

Advanced Algebra with Trig

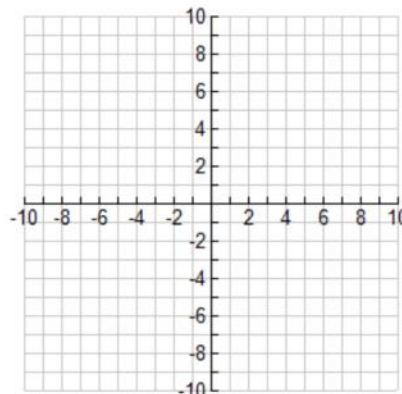
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2. Find the equation(s) of the asymptote(s) of the functions below. Then state the domain and range.

c. $y = \frac{3x+2}{-x+10}$

2. Graph the function in 1.b. (with the asymptote(s)). Plot at least six reasonably accurate points.



d. $y = \frac{6}{3x-4}$

Advanced Algebra with Trig

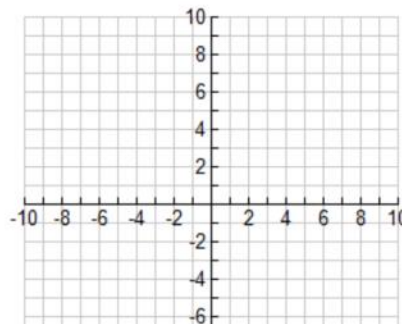
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3. Find the equation(s) of the asymptote(s) of the functions below. Then state the domain and range.

e. $y = \frac{3x+2}{-x+10}$

2. Graph the function in 1.b. (with the asymptote(s)). Plot at least six reasonably accurate points.



f. $y = \frac{6}{3x-4}$

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