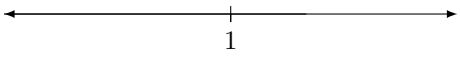
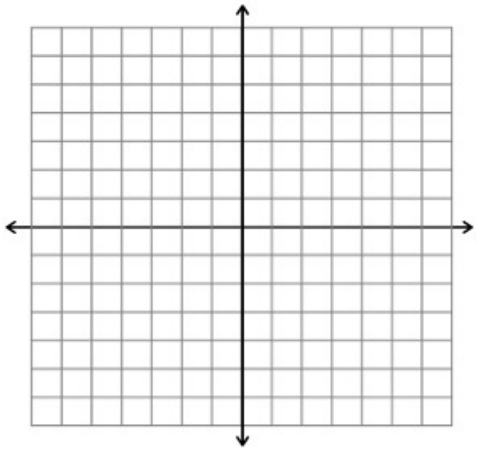
Calculus AB Worksheet 6 : Answers

1.

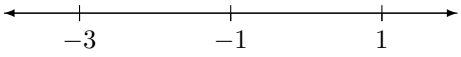
Holes	$(-3, \frac{1}{2})$
Zeros	None
Multiplicities	None
V. A.	$x = 1$
HA or SA	$y = 0$
Y-intercept	$(0, 2)$

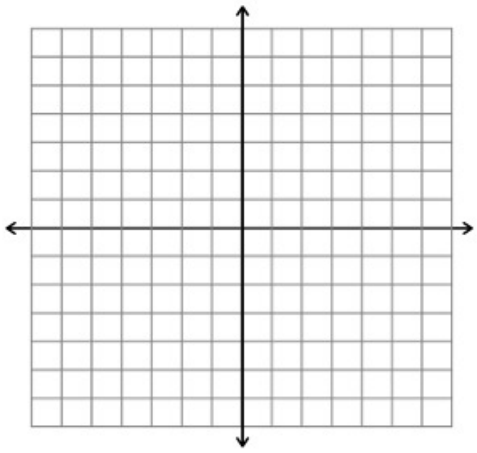




2.

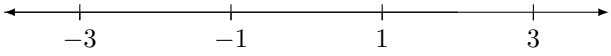
Holes	$(-3, 0)$
Zeros	-1
Multiplicities	1
V. A.	$x = 1$
HA or SA	$y = -2x - 10$
Y-intercept	$(0, 6)$

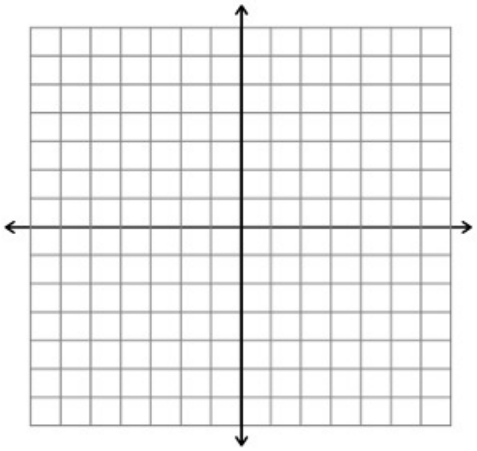




3.

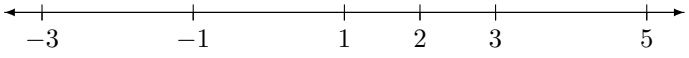
Holes	None	
Zeros	3	-1
Multiplicities	1	1
V. A.	$x = -3$ and $x = 1$	
HA or SA	$y = 2$	
Y-intercept	$(0, 2)$	

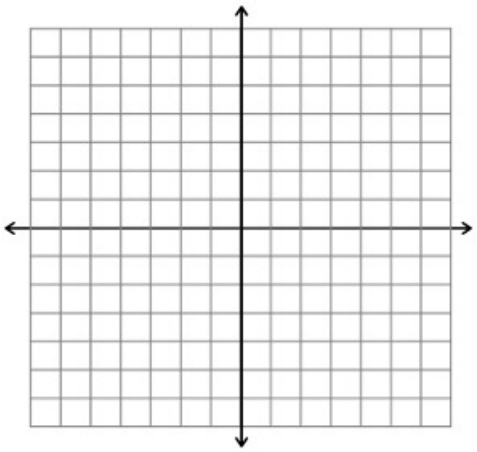




4.

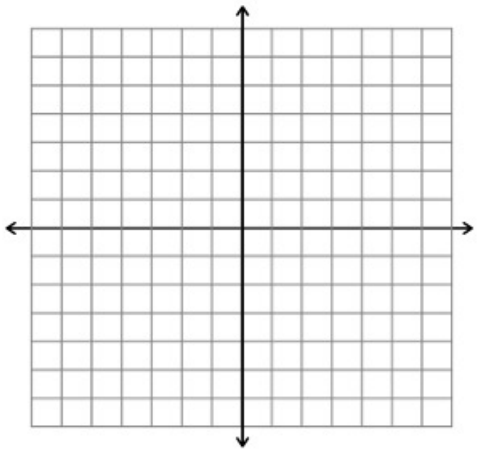
Holes	None			
Zeros	3	2	-1	5
Multiplicities	1	1	1	1
V. A.	$x = -3$ and $x = 1$			
HA or SA	None			
Y-intercept	$(0, 10)$			





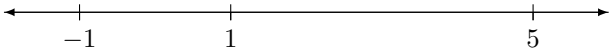
5.

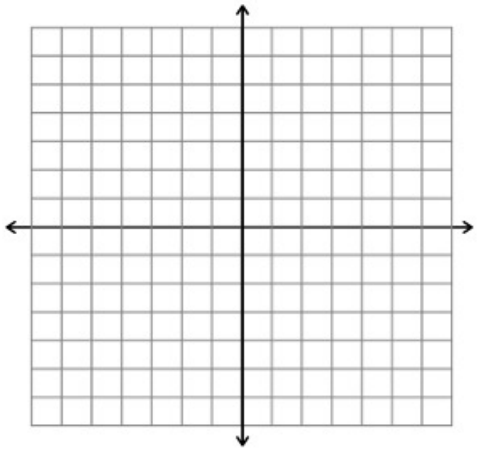
Holes	(1, 0)
Zeros	-1
Multiplicities	2
V. A.	$x = 5$
HA or SA	None
Y-intercept	$(0, \frac{1}{5})$



6.

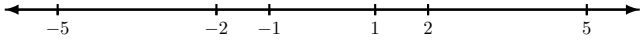
Holes	None
Zeros	-1
Multiplicities	2
V. A.	$x = 1$ and $x = 5$
HA or SA	$y = 0$
Y-intercept	$(0, -\frac{1}{5})$

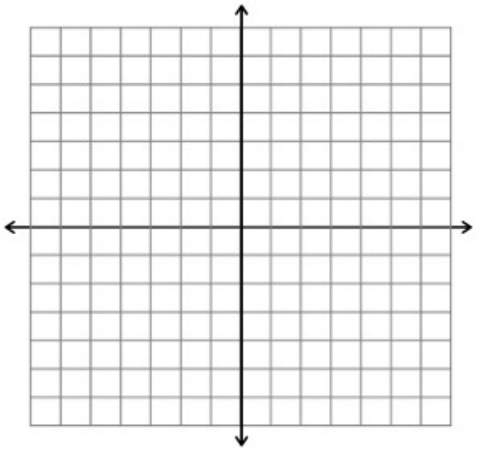




7.

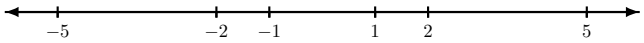
Holes	None			
Zeros	-5	2	-2	-1
Multiplicities	1	1	1	2
V. A.	$x = 5$ and $x = 1$			
HA or SA	None			
Y-intercept	$(0, -24)$			

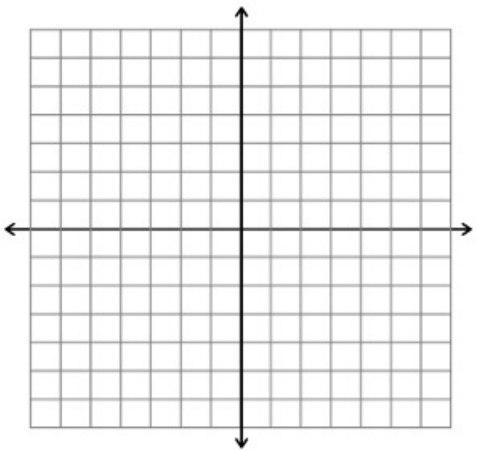




8.

Holes	None		
Zeros	-5	2	-1
Multiplicities	1	1	2
V. A.	$x = 5$, $x = 1$, x = -2		
HA or SA	$y = -6$		
Y-intercept	$(0, -6)$		





9. Horizontal asymptote $y = \dfrac{a^3}{d^2}$