1.	(2)	points	each,	no p	partial	credit)	${\rm Circle}$	"True	e" or	"False"	for	${\rm each}$	of t	he fo	ollowing	problems.	Circle
"T	rue"	only	if the	state	ement i	is alway	s true.	No e	xplar	nation is	nec	essary	V.				

(a) If A and B are positive constants, then the function  $f(x) = \log(|Ax + B|)$  has a vertical asymptote at x = -B/A.

True False

(b) If an exponential function of t, in years, has decreased to 60% of the original value in two years, in four years it will decrease to 30% of the original value.

True False

(c) If  $h(x) = 1.3(0.5)^x$  then the derivative, h', is decreasing for all x.

True False

(d) The functions  $\sin(e^x)$  and  $e^{\sin(x)}$  are inverses of each other.

True False

(e) If w is a continuous function for all x, then  $\lim_{h\to 0} \frac{w(x+h)-w(x)}{h}$  exists for all x.

True False

(f) If f''(x) > 0 on the interval [a, b], then the average rate of change of f(x) on the interval [a, b] is greater than f'(x) for all a < x < b.

True False