

6. (10 points)

(a) Suppose that  $h(x) = g(f(x))$ . Fill in the missing values based on the information given in the table:

$x$	1	2	3
$f(x)$	-1	1	
$g(x)$	$2/3$	$4/3$	$8/3$
$h(x)$	$1/6$		$8/3$

(b) Which, if any, of  $f$ ,  $g$  and  $h$  could be linear functions? Show evidence for your choice(s).

(c) Which, if any, of  $f$ ,  $g$  and  $h$  could be exponential functions? Show evidence for your choice(s).