

3. (12 points) This table describes two functions, $f(x)$ and $g(x)$.

x	$f(x)$	$f'(x)$	$g(x)$	$g'(x)$
1	π	1.4	1.5	-0.2
3	5	1	1	3
5	2.5π	0.3	6	4

a) (4 pts) Find $h'(3)$, assuming $h(x) = f(g(x))$. Show your work.

b) (4 pts) Find $j'(5)$, if $j(x) = \frac{f(x)}{g(x)}$. Show your work.

c) (4 pts) Find $k'(5)$, where $k(x) = xg(x)$. Show your work.