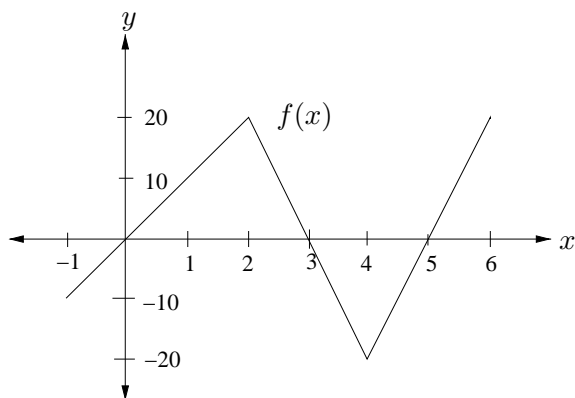


5. (20 points) A graph of $y = f(x)$ and a table of values for $g(x)$ and $g'(x)$ are given below. Use them to solve (a)-(d).



x	$g(x)$	$g'(x)$
0	10	-3
1	-2	4
2	5	20

(a) If $h(x) = 2f(x) + x^5$, find $h'(5)$.

(b) If $p(x) = 6f(x)(g(x) + 2)$, then find $p'(1)$.

(c) If $r(x) = g(f(x) - 9)$, find $r'(1)$.

(d) If $j(x) = g(f(3x)) + \cos(\frac{\pi}{2}x)$, then find $j'(1)$.