

HW 1 Solution / Rubric

1.1	$f+g$	$f \cdot g$
	even	even
	depends/uncertain	odd
	...	odd
	odd	even

If you use "neither" or "none", etc., you need to write what if $f=0$ or $g=0$

~0.5 each

1.2 $f \circ g = m_1 m_2 x + m_1 b_2 + b_1$

slope = $m_1 m_2$

1.4 (i) $f = e$ $n=1$

$f = \bar{I}, \bar{I}', \bar{I}''$ $n=2$

$f = \sigma, \sigma'$ $n=3$

↑

↑

1 each

1 each

1.5

(i) 1 point each plot.

for plots line

$f_1 - f_4$ plot points.

- Do not connect points with curve or line
- Adjust the range of axes
- Draw plots separately

(ii) 13.7627, 13.7763, 13.7562, 13.7425

1.6 (a), (b)

mark the breakpoints 0.5 each

(b) formula of $v(t)$ 0.5

1.7 (a), (b), (c)

formulas 0.5 each

plots 0.5 each