

KEY ANSWERS FOR ADDITIONAL HOMEWORK 1

[1]

x	y
$-\frac{21\pi}{6}$	0
$-\frac{17\pi}{6}$	-3
$-\frac{13\pi}{6}$	-6
$-\frac{9\pi}{6}$	-3
$-\frac{5\pi}{6}$	0
$-\frac{\pi}{6}$	-3
$\frac{3\pi}{6}$	-6
$\frac{7\pi}{6}$	-3
$\frac{11\pi}{6}$	0

[2]

x	y
2	2
5	-3
8	2
11	7
14	2
17	-3
20	2
23	7
26	2

[4]

$$y = -\frac{19}{2} \sin \frac{3}{2} \left(x + \frac{\pi}{6} \right) - \frac{13}{2}$$

[5]

$$y = -48 \cos \frac{\pi}{16} (t - 3) + 53$$