

3(a)	Median = [\\$]32400
	[IQR = \$]33500 – [\\$]31300
	= [\\$]2200
3(b)	[Mean =] $\frac{878.3 + 896.5}{54} [= 32.867]$
	so [\\$]32900
	[Variance =] $\left[\frac{28616.09 + 29815.63}{54} - \left(\frac{1774.8}{54} \right)^2 = \right]$
	$\frac{58431.72}{54} - \left(\frac{1774.8}{54} \right)^2$
	= 1.8511
	$\sigma = 1.36$, so $\sigma = [\$]1360$

5(a)

CW	10	10	5	5	20
FD	1.2	3.8	13.6	15.2	2.3

frequency density

Time taken (minutes)

Time taken (minutes)	Frequency density
0.5 - 10.5	1
10.5 - 20.5	4
20.5 - 30.5	14
30.5 - 40.5	15
40.5 - 50.5	2.5

5(b)	Mean = $\frac{5.5 \times 12 + 15.5 \times 38 + 23 \times 68 + 28 \times 76 + 40.5 \times 46}{240}$
	= 25.875

3(a)											
	Gulls						Hérons				
	9					7					
	8	6	6	3	2	8	1	3	5	7	
	8 7 2					9	2	3	5	7 9 9	
	4 0					10	8				
Key: 7 9 5 means 9.7 seconds for Gulls and 9.5 seconds for Herons											

3(b)	Median = 8.8 (seconds)
	[LQ 8.3, UQ 9.8] $9.8 - 8.3$
	1.5
3(c)	Mean = $\frac{175.0 + 30 \times 8.4}{50}$ or $\frac{175.0 + 252.0}{50}$
	= 8.54
3(d)	$1.38^2 = \frac{(1823.0 + \sum y^2)}{50} - \text{their} \left(\frac{427.0}{50} \right)^2$
	Solve to find $\sum y^2$
	$\sum y^2 = 1918.8$