Problems

1. a. $\bar{X} = 10$
   b. $\bar{X} = 8$
   c. $\bar{X} = 3$
   d. $\bar{X} = 16$

2.

X	f	$X - \bar{X}$	$f(X - \bar{X})$
10	1	4	4
9	2	3	6
8	1	2	2
7	4	1	4
6	6	0	0
5	5	−1	− 5
4	2	−2	− 4
3	1	−3	− 3
2	2	− 4	− 4
	$N = 23$		$\Sigma f (X - \bar{X}) = 0$

   $Mo = 6$
   $\bar{X} = 6$
   Md (counting method) $= 6$

3. $Mo = 6$, $Md = 6$, $\bar{X} = 5.8$

4. $Mo = 2$, $Md = 3$, $\bar{X} = 2.8$

5. $Mo = 15$, $Md = 14$, $\bar{X} = 12.6$

6. $Mo = 27$, $Md = 27.5$, $\bar{X} = 27.85$

7. with nonresponders: $Md = 35$
   omitting nonresponders: $Mo = 33$, $Md = 33$, $\bar{X} = 33.15$

8. a. 1.45. If the number in the thousandths place is less than 5, drop it and all the following numbers**.**
   b. 1.56. If the number in the thousandths place is 5 or more, round the preceding digit up.
   c. 3.67; same as b
   d. 23.33; same as a
   e. 7.83; same as b