## MA122 HW5 Tuesday

## 1. 8-4: 14, 28

2. Derive Equation (2) and (3) in Section 8-5, and show that if

$$\overline{x} = \frac{1}{n} \sum_{k=1}^{n} x_k$$
 and  $\overline{y} = \frac{1}{n} \sum_{k=1}^{n} y_k$ 

are the averages of the x and y coordinates, respectively, then the point  $(\overline{x}, \overline{y})$  satisfies the equation of the least squares line y = ax + b.

3. 8-5: 28