Problem Q9.2. It seems that now we multiply Qb^T to get the projections of our data on the line:

$$\frac{1}{5}\begin{bmatrix} 95487 \\ 110994 \\ 125352 \\ 152931 \\ 175350 \\ 192186 \\ 209937 \\ 216360 \\ 226326 \end{bmatrix} \begin{bmatrix} 23.4 & 168 \end{bmatrix} = \begin{pmatrix} \frac{11171979}{25} & \frac{16041816}{5} \\ \frac{12986298}{25} & \frac{18646992}{5} \\ \frac{14666184}{25} & \frac{21059136}{5} \\ \frac{17892927}{25} & \frac{25692408}{5} \\ 820638 & 5891760 \\ \frac{22485762}{25} & \frac{32287248}{5} \\ \frac{24562629}{25} & \frac{35269416}{5} \\ \frac{5062824}{5} & 7269696 \\ \frac{26480142}{25} & \frac{38022768}{5} \end{pmatrix}$$