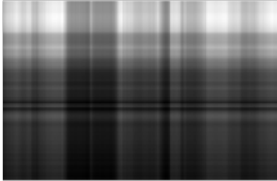
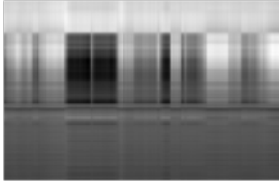




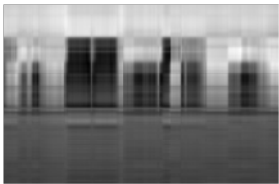
(a) Original image  $\mathbf{A}$ .



(b) Rank-1 approximation  $\hat{\mathbf{A}}(1)$ .



(c) Rank-2 approximation  $\hat{\mathbf{A}}(2)$ .



(d) Rank-3 approximation  $\hat{\mathbf{A}}(3)$ .



(e) Rank-4 approximation  $\hat{\mathbf{A}}(4)$ .



(f) Rank-5 approximation  $\hat{\mathbf{A}}(5)$ .