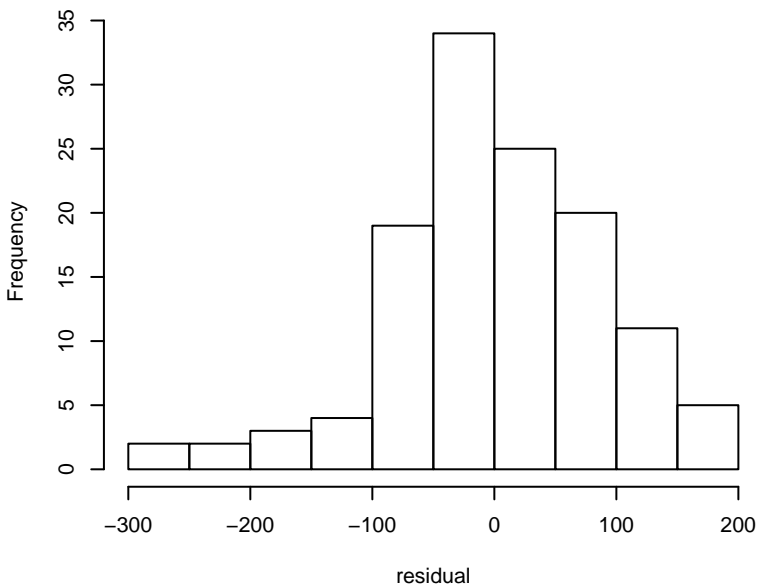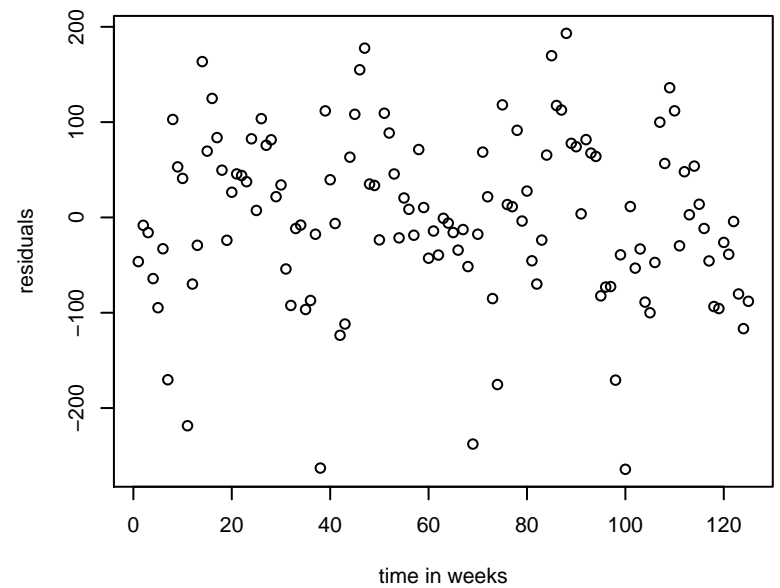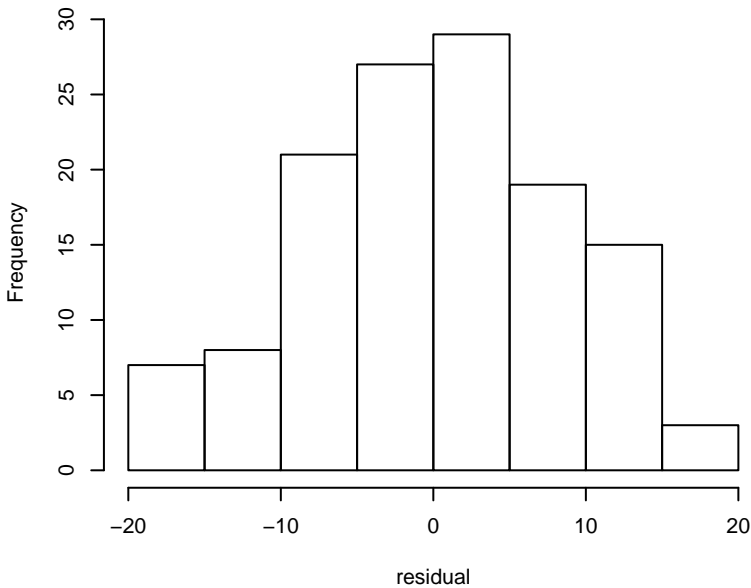**Histogram of residuals for national optimization using a lag of 2 (using no seasonal indicator)**
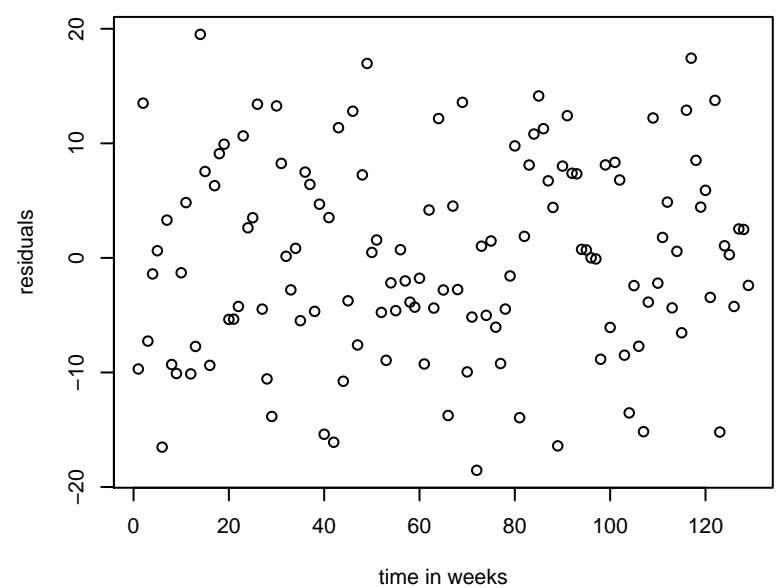
Residuals for national optimization using a lag of 2 (using no seasonal indicator)
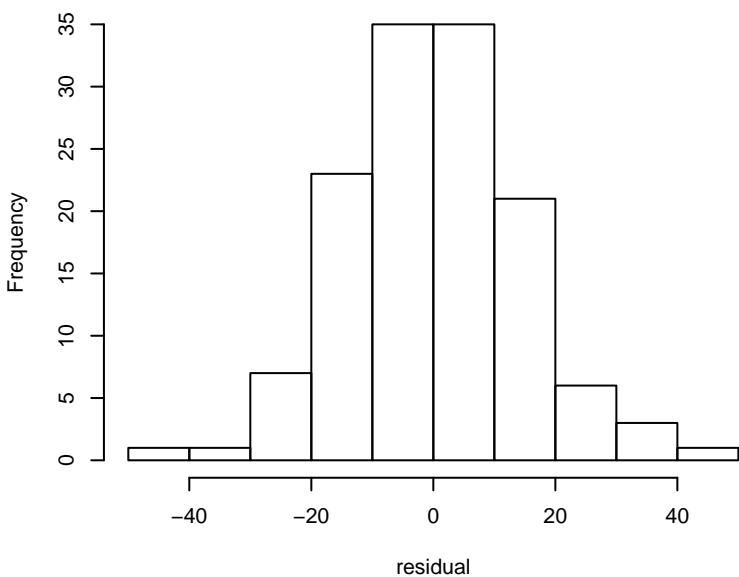
Histogram of residuals for HHS region 1 optimization using a lag of 1 (using no seasonal indicator)

Residuals for HHS region 1 optimization using a lag of 1 (using no seasonal indicator)

Histogram of residuals for HHS region 2 optimization using a lag of 0 (using no seasonal indicator)
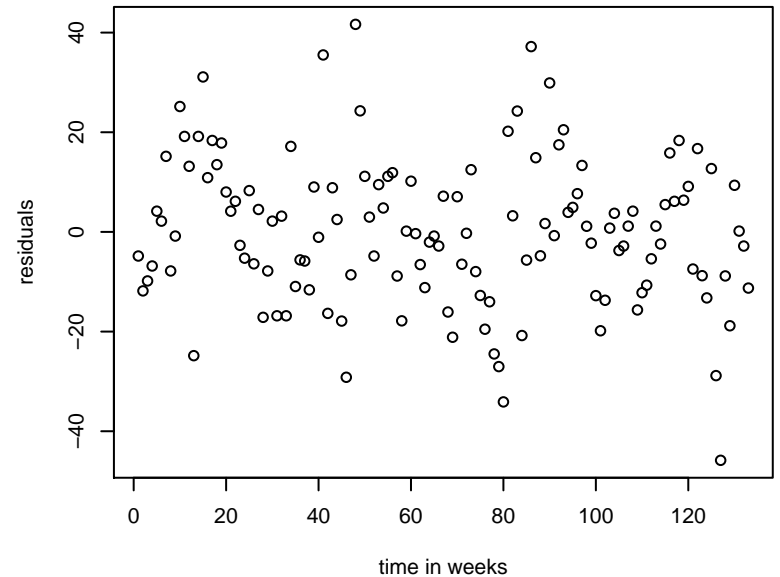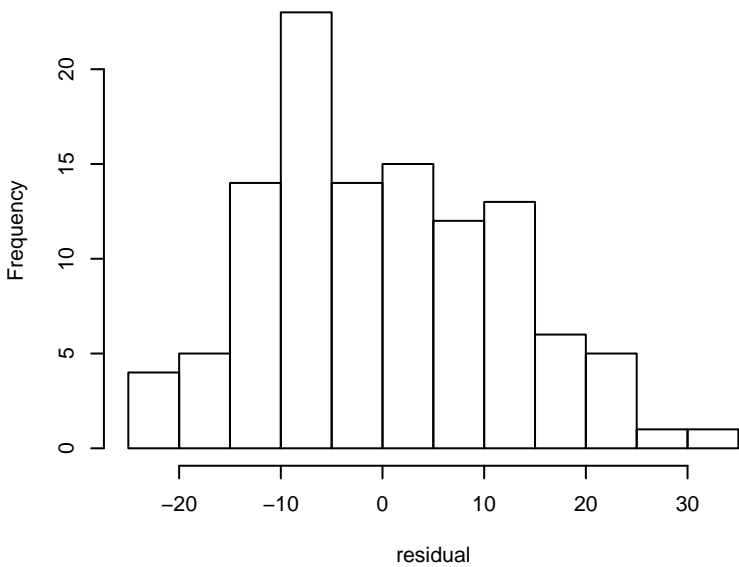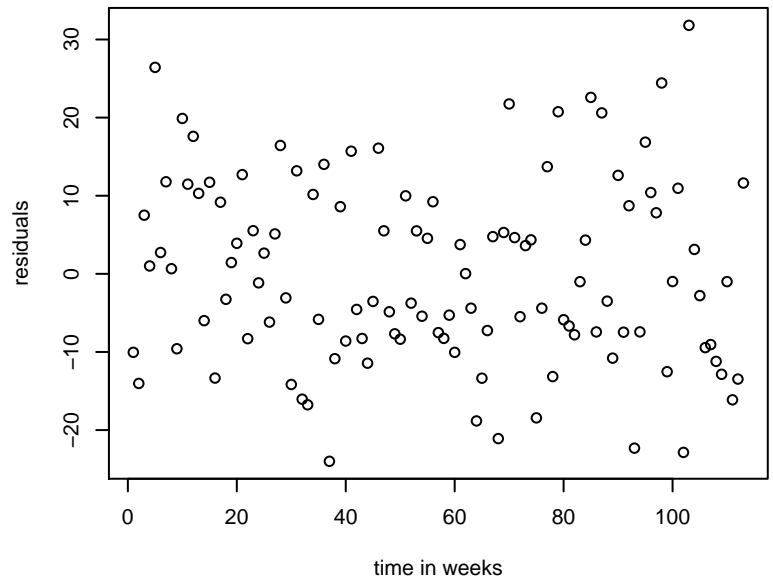
Residuals for HHS region 2 optimization using a lag of 0 (using no seasonal indicator)
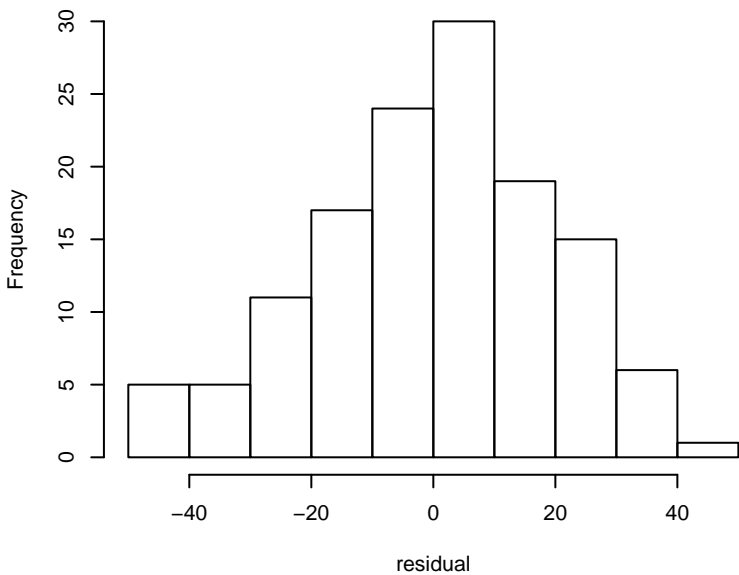
Histogram of residuals for HHS region 3 optimization using a lag of 5 (using no seasonal indicator)

Residuals for HHS region 3 optimization using a lag of 5 (using no seasonal indicator)

Histogram of residuals for HHS region 4 optimization using a lag of 0 (using no seasonal indicator)

Residuals for HHS region 4 optimization using a lag of 0 (using no seasonal indicator)

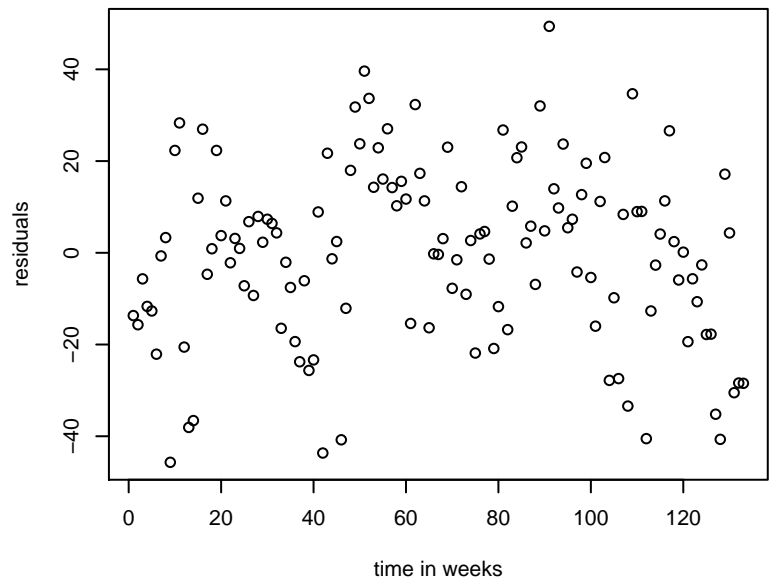**Histogram of residuals for HHS region 5 optimization using a lag of 5 (using no seasonal indicator)**

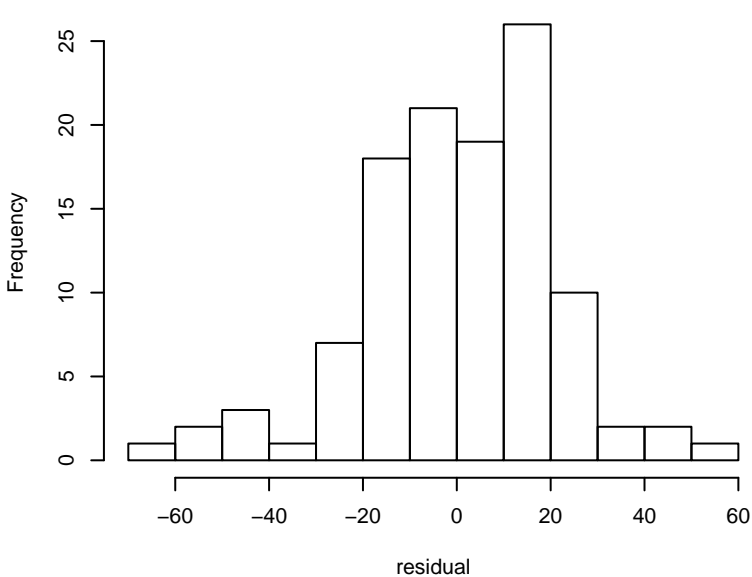**Residuals for HHS region 5 optimization using a lag of 5 (using no seasonal indicator)**

Histogram of residuals for HHS region 6 optimization using a lag of 3 (using no seasonal indicator)
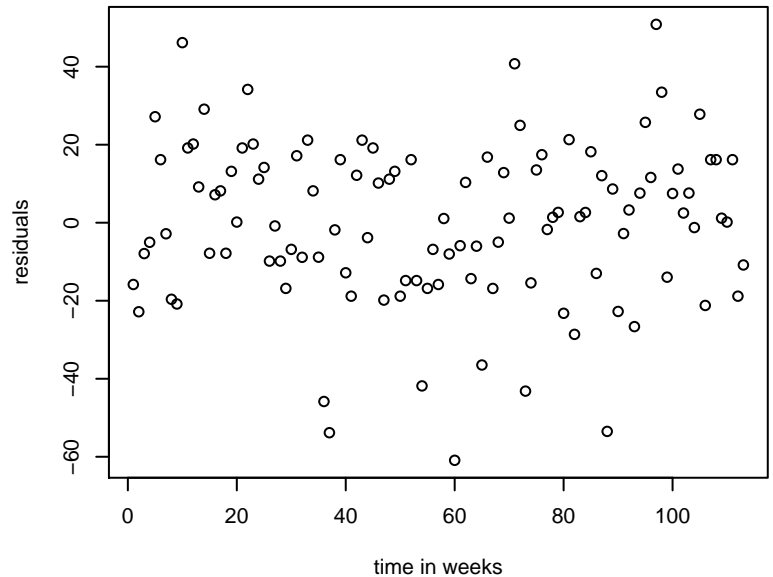
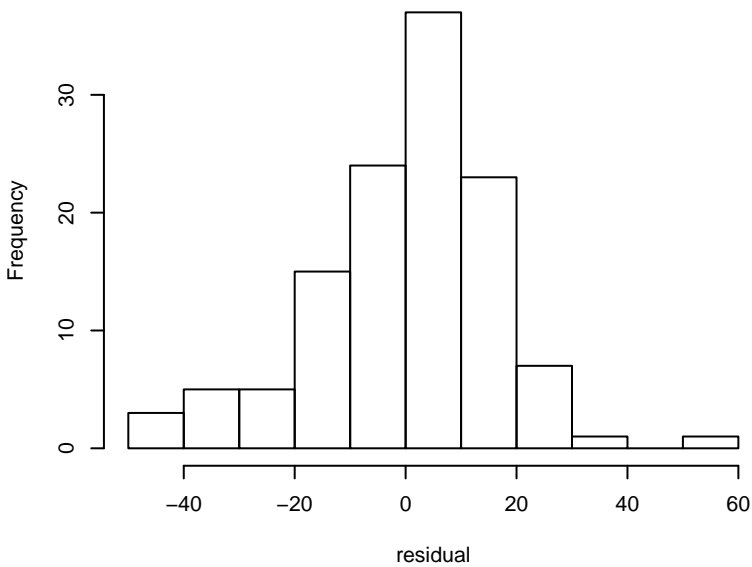**Residuals for HHS region 6 optimization using a lag of 3 (using no seasonal indicator)**

Histogram of residuals for HHS region 7 optimization using a lag of 5 (using no seasonal indicator)
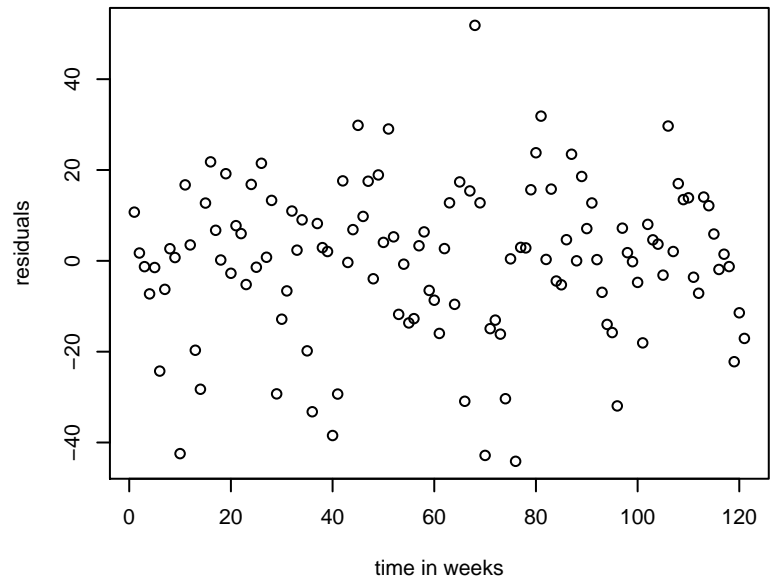
Residuals for HHS region 7 optimization using a lag of 5 (using no seasonal indicator)
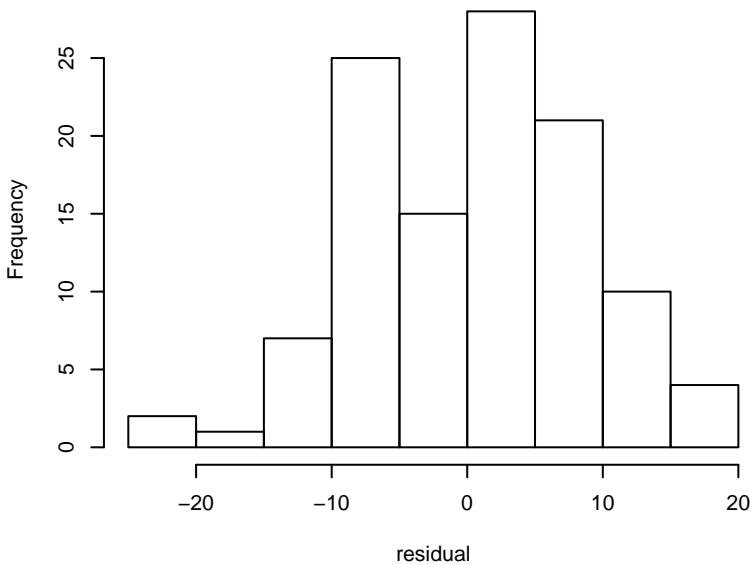
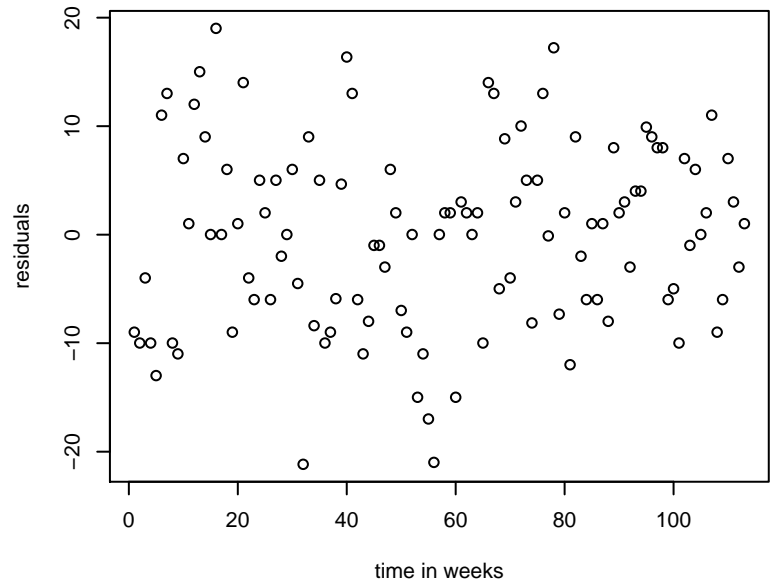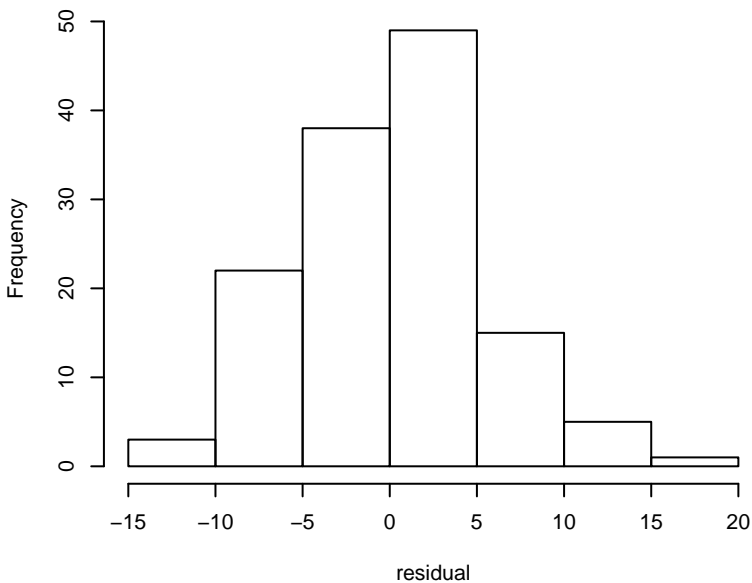**Histogram of residuals for HHS region 8 optimization using a lag of 0 (using no seasonal indicator)**

Residuals for HHS region 8 optimization using a lag of 0 (using no seasonal indicator)

Histogram of residuals for HHS region 9 optimization using a lag of 5 (using no seasonal indicator)
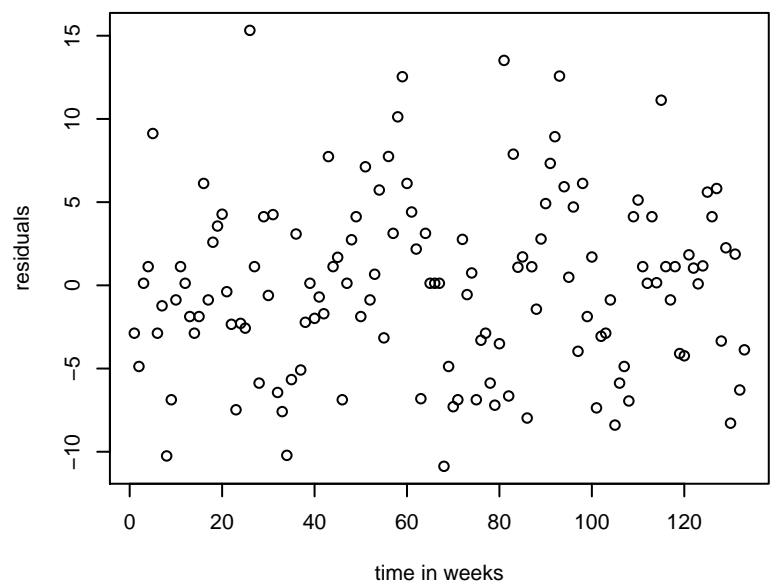
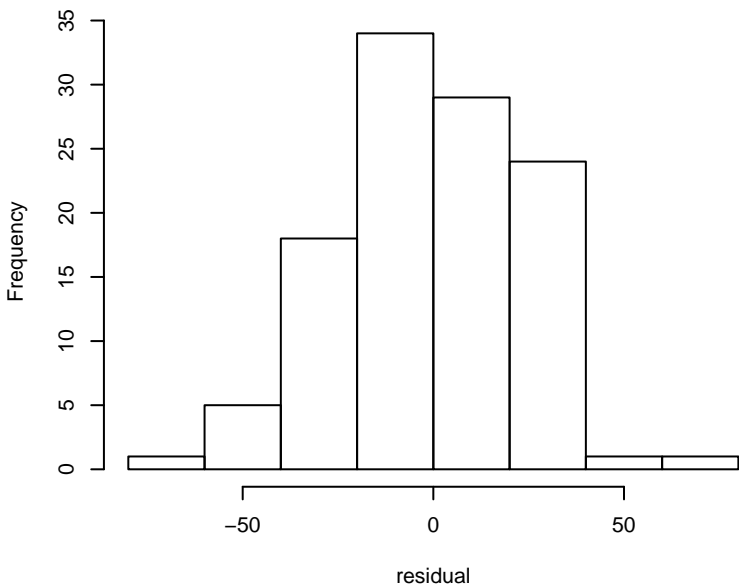**Residuals for HHS region 9 optimization using a lag of 5 (using no seasonal indicator)**

Histogram of residuals for HHS region 10 optimization using a lag of 1 (using no seasonal indicator)
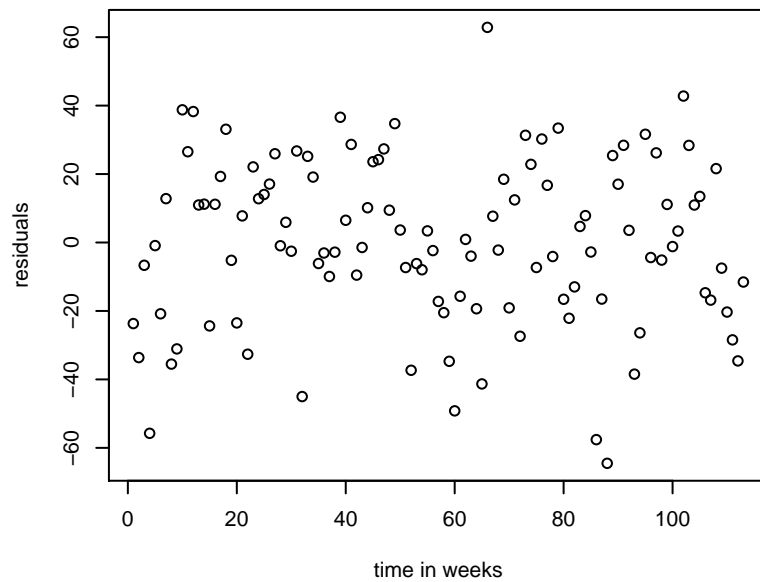
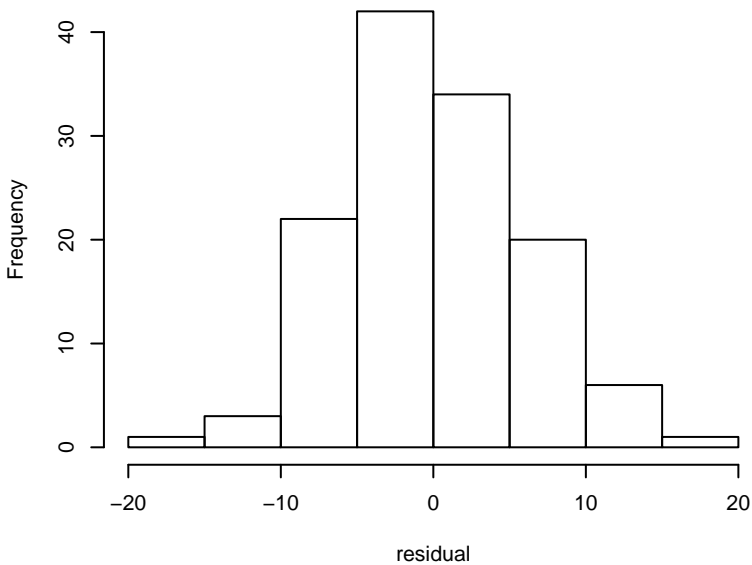**Residuals for HHS region 10 optimization using a lag of 1 (using no seasonal indicator)**