(34) $P(\bar{x} < .79) = .1587$

$P(\bar{x} < .77) = .001350$

(35) a) The distribution is approximately $N(50, .1)$

b) $P(49.75 < \bar{x} < 50.25) = .9876$

c) $P(\bar{x} < 50) = .5$

(36) $P(\hat{p} > .25) = .1056$

(37) a) $\mu_{\bar{x}} = 52, \sigma_{\bar{x}} = 1/3$

b) $P(\bar{x} > 50) \approx 1$

$P(\bar{x} > 55) \approx 0$

(38) a) $P(850 < x < 1300) = .8186$

b) $P(950 < \bar{x} < 1100) = .8366$

$P(850 < \bar{x} < 1300) = .9921$

(39) a) $P(\hat{p} \geq .5) = .0206$

b) $P(\hat{p} \geq .6)$ is approximately 0 so I would suspect that $p \neq .4$ for my state.