

HW 7.1 Part A pages 428-429 problems 1-8

- ① Population: people who signed a card saying they intended to quit smoking

Parameter of interest: proportion of people who signed card saying they would not smoke who actually quit smoking

Sample: random sample of 1000 people who signed the cards

Statistic: $\hat{p} = 0.21$

- ② Population: Individuals in the U.S.

Parameter of Interest: proportion of U.S. population who were unemployed

Sample: a random sample of individuals from 55,000 U.S. households

Statistic: $\hat{p} = .10$

- ③ Population: all the turkey meat

Parameter of Interest: minimum temperature

Sample: 4 randomly chosen points in the turkey

Statistic: sample minimum = 170°

- ④ Population: all gasoline stations in a large city

Parameter of Interest: range of gas prices at the gasoline stations in the city.

Sample: a random sample of 10 gas stations in the city

Statistic: sample range = 25 cents

5) $\mu = 2.5003$ parameter
 $\bar{x} = 2.5009$ statistic

6) $p = 0.41$ is a parameter
 $\hat{p} = 0.33$ is a statistic

7) $\hat{p} = .48$ statistic
 $p = .52$ parameter

8) $\bar{x} = 64.5$ inches statistic
 $\mu = 63$ inches parameter