Lesson 5.2 Practice: Random Sampling Methods

School Launch · Statistics · Unit 5: Collecting Data: Samples and Experiments · Worksheet A

Calculator / tables

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. A school of 1931 students: a simple random sample of 24 is chosen. What is the probability that a particular student is chosen? (fraction and percent, nearest tenth)

EASY

2. A school of 244 students: a simple random sample of 69 is chosen. What is the probability that a particular student is chosen? (fraction and percent, nearest tenth)

EASY

3. A school of 1959 students: a simple random sample of 95 is chosen. What is the probability that a particular student is chosen? (fraction and percent, nearest tenth)

EASY

4. A school has three grades with 117, 239 and 206 students. A proportional stratified sample of 66 is taken. How many from each grade (nearest whole)? For a systematic sample of 66 from 1338, what is the interval k ? MEDIUM

5. A school has three grades with 493, 460 and 314 students. A proportional stratified sample of 33 is taken. How many from each grade (nearest whole)? For a systematic sample of 33 from 980, what is the interval k?

MEDIUM

6. A school has three grades with 168, 346 and 150 students. A proportional stratified sample of 98 is taken. How many from each grade (nearest whole)? For a systematic sample of 98 from 434, what is the interval k?

MEDIUM

7. A school has three grades with 134, 120 and 423 students. A proportional stratified sample of 27 is taken. How many from each grade (nearest whole)? For a systematic sample of 27 from 1542, what is the interval k ? MEDIUM

8. A school has three grades with 282, 438 and 262 students. A proportional stratified sample of 20 is taken. How many from each grade (nearest whole)? For a systematic sample of 20 from 1380, what is the interval k ? HARD

9. A school has three grades with 411, 305 and 440 students. A proportional stratified sample of 70 is taken. How many from each grade (nearest whole)? For a systematic sample of 70 from 1773, what is the interval k ? HARD

10. A school has three grades with 493, 410 and 116 students. A proportional stratified sample of 20 is taken. How many from each grade (nearest whole)? For a systematic sample of 20 from 1586, what is the interval k ? HARD