Practice worksheet | Statistics and sampling

Comparing samples and sample sizes

Name: _____ Date: _____

6 questions | 15 marks

1. Compare 12 of 20 with 42 of 100 as percentages. [3 marks]

2. A random sample of 25 from 500 students includes 10 cyclists. Estimate the population count and state a limitation. [3 marks]

3. Why might 1000 responses from sports-club members still misrepresent all students’ exercise? [2 marks]

4. An unusual value is included in samples of 10 and 100, with otherwise similar observations. In which does it influence the mean more? [2 marks]

5. Name two details to match when comparing samples as evidence of a change over time. [2 marks]

6. Which usually produces more stable proportions: random samples of 20 or 200? Is exact agreement guaranteed? [3 marks]