Practice worksheet | Sampling and confidence intervals

# Confidence intervals for a population mean

Name: _____ Date: _____

6 questions | 13 marks

**1.** A normal population has known SD 12. A sample of 36 has mean 80. Find a 95% interval. [2 marks]

**2.** For mean 18.5, known SD 4 and $n = 64$, use 1.645 for a 90% interval. [2 marks]

**3.** An interval is $(12.2, 15.8)$. Recover its centre and margin. [2 marks]

**4.** A known-spread normal interval uses $n = 6$ from a strongly skewed population. What is the concern? [2 marks]

**5.** A mean estimate is 250 with standard error 2.5. Use 2.576 for a 99% interval. [2 marks]

**6.** A large independent random sample has $n = 144$, mean 48.2 and sample standard deviation 12. Population spread is unknown. Use an approximate 95% normal interval for the mean. [3 marks]