Practice worksheet | Statistics and regression

# Normal distributions

Name: _____ Date: _____

6 questions | 18 marks

**1.** For $X \sim N(40, 9)$, state the mean and standard deviation. [3 marks]

**2.** A normal model has $\mu = 100$ and $\sigma = 15$. Standardise $x = 85$. [3 marks]

**3.** For $\mu = 60$ and $\sigma = 5$, give the approximate central 68% interval. [3 marks]

**4.** For $\mu = 60$ and $\sigma = 5$, give the approximate central 99.7% interval. [3 marks]

**5.** In a continuous normal model, find $P(X = \mu)$. [3 marks]

**6.** A histogram has two well-separated peaks. Is a single normal model automatically justified by knowing its mean and SD? [3 marks]