Practice worksheet | Counting and introductory statistics

Normal-curve features and the 68-95-99.7 rule

Name: _____ Date: _____

6 questions | 13 marks

1. A normal model has mean 30 and sd 5. Give the interval containing about 68%. [2 marks]

2. For the same model, estimate the proportion above 40. [2 marks]

3. Estimate the proportion between the mean and 1 standard deviation above it. [2 marks]

4. Estimate the proportion more than 3 standard deviations from the mean. [2 marks]

5. A normal model has mean 100 and sd 15. Estimate how many of 800 observations lie from 85 to 115. [2 marks]

6. A distribution of waiting times has a long right tail. Is it justified to assume 68% lie within one sd? Explain. [3 marks]