Algebra II Journal S.ID.A.4: Normal Distributions www.jmap.org

NAME:

1. A study shows that 80% of the selling prices of houses in an area are within two standard deviations of the mean. Is this a normal distribution? Explain.

2. Sketch a normal curve that has a mean of 6 and a standard deviation of 2.

3. Choose a mean and standard deviation. Graph the normal distribution for those numbers.

Answers may vary. Sample: No; in a normal distribution, 95% of the selling prices would be [1] within 2 standard deviations of the mean.

Check students' graphs. Center of curve should be centered at 6. Intervals should be marked for 0, [2] 2, 4, 6, 8, 10, and 12.

[3] Check students' graphs.