

NAME: _____

P.I. A2.S.5: Know and apply the characteristics of the normal distribution

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 within 2
[1] standard deviations of the mean.

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

[3] Check students' graphs.