Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AMDM – QUIZ

Unit IV – Activity Sheet 4

Suppose that a ball has a rebound percentage of 75 and the ball is dropped from a height of 5 ft. onto the concrete below.

1. Make a table of the data.

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| --- | --- | --- | --- | --- | --- |
| Bounce # | 0 | 1 | 2 | 3 | 4 |
| Height of Bounce |  |  |  |  |  |

1. Make a scatterplot of the data. Be sure to include your window.

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1. Write a recursive rule for the data.
2. Write a closed-form function rule for the data.
3. What would the height of the 5th bounce of this ball be if the initial drop height is 10ft above the ground?

Suppose that a ball has a rebound percentage of 60 and the ball is dropped from a height of 8 ft. onto the concrete below.

1. Make a table of the data.

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| --- | --- | --- | --- | --- | --- |
| Bounce # | 0 | 1 | 2 | 3 | 4 |
| Height of Bounce |  |  |  |  |  |

1. Make a scatterplot of the data. Be sure to include your window.

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1. Write a recursive rule for the data.
2. Write a closed-form function rule for the data.
3. What would the height of the 5th bounce of this ball be if the initial drop height is 20ft above the ground?