Geometric Sequence | Word Problems

1) Victor drops a bouncing ball from a height of 12 feet. On the first bounce, the ball returns to a height of 6 feet. It returns to a height of 3 feet after the second bounce. How high does the ball bounce the third time?

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2) A group of bacteria in a certain culture increases gradually. Thirty-five bacteria are present in the culture initially. The number increases to 70 in 10 minutes. If the bacteria continues to multiply at the same rate, determine the number of bacteria that will be found at the end of 20, 30 and 40 minutes respectively.

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3) Anna runs a pretzel shop in the mall. She sells 90 pretzels in the first hour, 180 pretzels in the second hour, 360 pretzels in the third hour, and so on in a geometric sequence. How many pretzels does Joanne sell in the 6th hour?

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4) The value of a Pricemart share is $15 in year 1. The value increases to $30 in the 2nd year and $60 in the 3rd year. If the price continues to increase in a geometric sequence, how much will a Pricemart share cost in the fifth year?

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5) One grain of wheat was placed on the first square of the chessboard. Two grains were placed on the second square, 4 grains on the third square and so on. Determine the number of grains that will be placed in each of the 4th, 5th and 6th squares on the chessboard.

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