Suppose that I give you a penny today and double it every day for 20 days.

- What kind of function would model this situation?
 Exponential: y = 1 (2)^x
- How could you determine on which day you will receive \$0.64?
 replace y with 64 and solve for x: 64 = 1(2)^x
- How does answering this question relate to the concept of an inverse function?

You'd like to be able to rewrite the equation and get x =, which is the inverse.

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In the Sierpinski Triangle

• what are the two variables in the situation?

of iterations & # of upward triangles

In the Sierpinski Triangle

• Which is the independent variable and which is the dependent variable?

Indep var = # iterations
Dep var = # of upward triangles

Answer SAS3 questions 2 & 3

In the Sierpinski Triangle

• Why is this a functional relationship?

Because for any given iteration there is only one amount of upward triangles.

Agilemind - Topic 2 - exponential function & its inverse page 3 answer #'s 2 & 3

Answer SAS3 question 4 Agilemind - Topic 2 - exponential function & its inverse page 4

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Answer SAS3 questions 5 & 6

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Answer SAS3 questions 7 & 8

Answer SAS3 - question 9

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Answer SAS3 - question 10