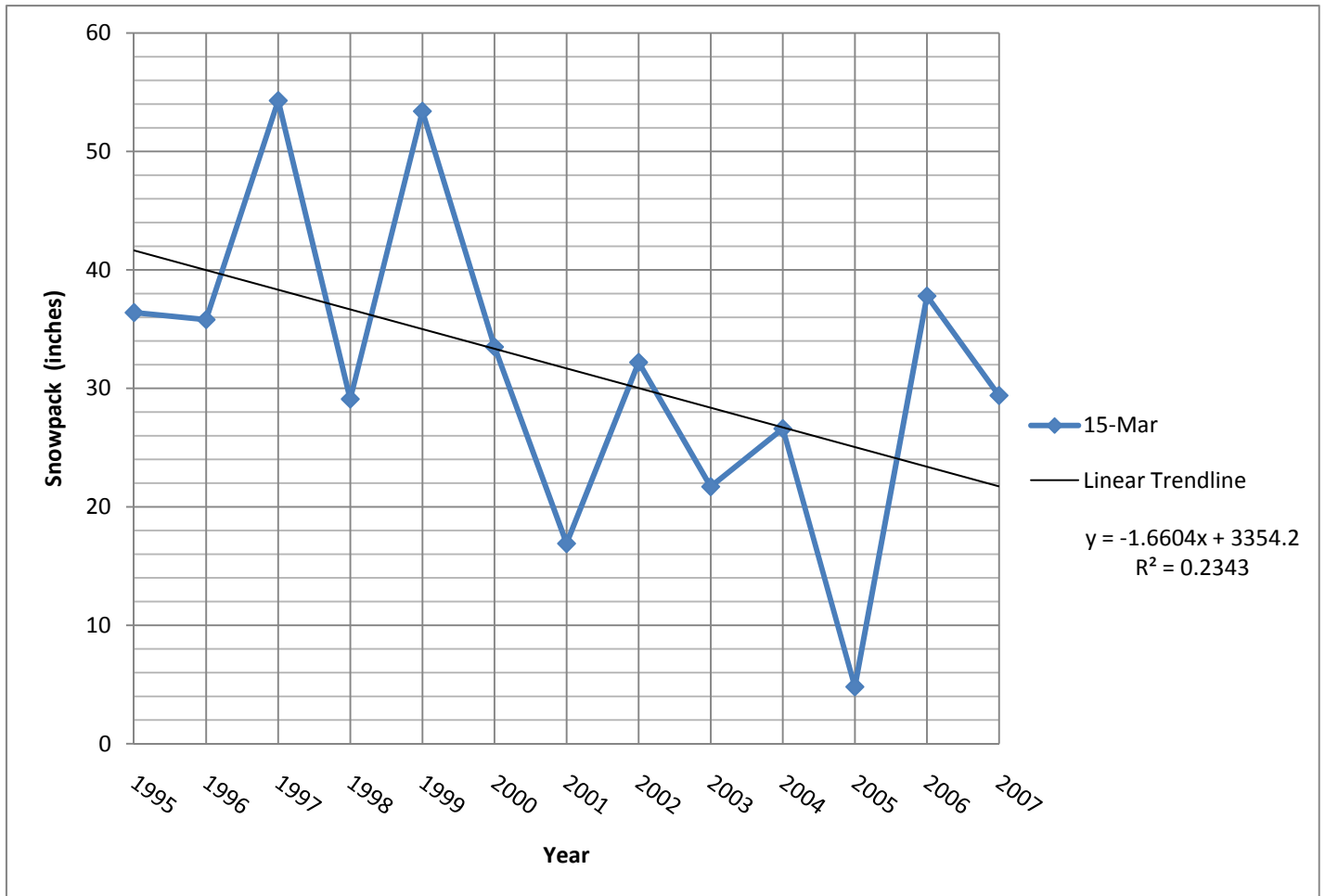
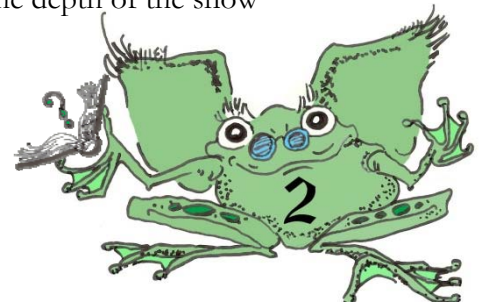


Refer to the graph below to answer questions 3-10. It shows the depth of snow on March 15 (near the end of winter) at a place called Fish Lake in the North Cascade Mountains from 1995 to 2007. Each year scientists measured the depth of the snow (snow pack). *During the years of this study, there was an increase in the amount of winter precipitation.* The data was plotted and a best-fit line was drawn. (Data from the North Cascade Glacier Climate Project, http://www.nichols.edu/departments/glacier/snowpack_variations_in_the_north.htm)

Fish Lake Snow Pack on March 15



- According to the best-fit line on the graph, what has happened to the depth of the snow pack from 1995 to 2007 (years 0 to 12)?



-
-
4. The research team of scientists considers this data to be evidence of global warming. Do you agree? If yes, explain why you agree. If no, explain why you do not agree.

5. Using the best-fit line, predict what the snow pack (depth of snow in inches) will be on March 15 in 2015.

6. Which of the following values is the closest to the unit rate of change (slope) for the best-fit line on the graph? _____

a. $-0.6 \frac{\text{inches}}{\text{year}}$

b. $0.6 \frac{\text{inches}}{\text{year}}$

c. $-1.6 \frac{\text{inches}}{\text{year}}$

d. $1.6 \frac{\text{inches}}{\text{year}}$

7. Using the unit rate of change (slope) you calculated and picked in #6, what will happen to the depth of the snow after five (5) years? Will it increase or decrease? By what numerical value will it change?

