Name: _____ Date: _____

BLM 6–8

Section 6.2 Math Link

This worksheet will help you with the Math Link on page 230.

The area of the ocean called the Intertropical Convergence Zone (ITCZ) has little or no wind. Before propellers and motors, sailors used a relatively light anchor called a kedge to help them move across this region. The kedge anchor, which was attached to a line, was rowed out approximately 650 m ahead of the ship and dropped to the sea floor. A crew on the ship then grabbed the line and hauled it in to pull the ship to the anchor, a distance of 650 m. This process, called kedging, was repeated until the boat passed through the ITCZ.

1. a) Complete the table of values to show the relationship between the number of kedges and the total distance travelled.

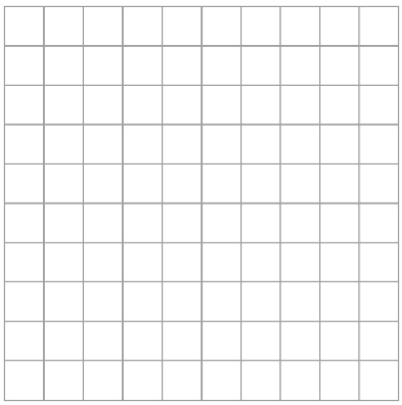
Hint: 1 km = 1000 m

b) What linear equation represents this relationship?

_____

Number of Kedges, *k*	Distance, *d* (km)
1	0.65
100	65
500	
1000	
2000	

2. Plot the data on a graph. Label the graph.



3. a) Use the graph to estimate how many kedges it would take to cross the ITCZ where it is 1100 km wide. _____

b) Use the linear equation to calculate the answer for part a).

4. How did the skills you have learned in this chapter help you solve #3?

_____

_____