

1.3 Raising Money

Our three friends, Alana, Gilberto, and Leanne, have decided to enter a walkathon to raise money for charity. Each student found sponsors who are willing to pledge the following amounts:

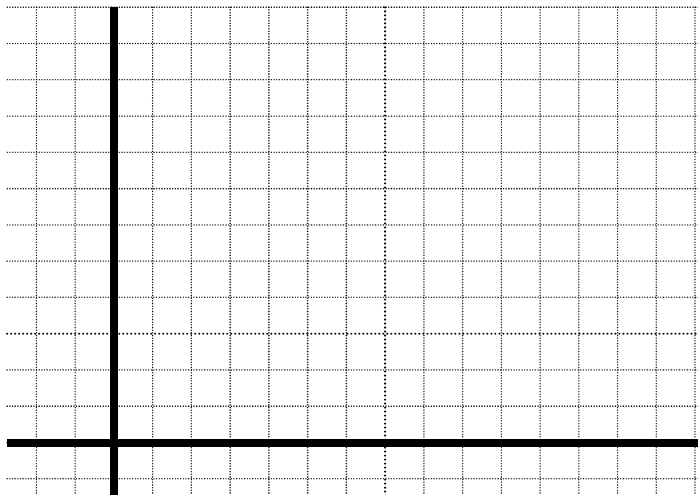
- Leanne’s sponsor will donate \$10 regardless of how far she walks
- Gilberto’s sponsor will donate \$2 per kilometer (km).
- Alana’s sponsor will make a \$5 donation plus \$0.50 per kilometer.

1. **Make a table** for each student’s pledge plan, showing the amount of money each of his or her sponsors would donate if he or she walked distances from zero to six kilometers.

Distance (km)	Money Raised \$\$		
	Alana	Gilberto	Leanne
0			
1			
2			
3			
4			
5			
6			

What are the dependent and independent variables?

2. **Graph** the three pledge plans on the same coordinate axes. Label each student’s line.



3. **Write an equation** for each pledge plan.

Alana:

Gilberto:

Leanne:

What information does each number and variable in your equation represent?

4. a) What pattern of change do you observe for Alana in the table?

b) What pattern of change do you observe for Gilberto in the graph?

c) What pattern of change do you observe for Alana and Gilberto in the equation?

Alana:

Gilberto:

d) What is different about the patterns of change for Leanne?

5. Suppose each student walks 8 kilometers in the walk-a-thon. How much money does each sponsor donate?

Alana:

Gilberto:

Leanne:

6. Suppose each student raises \$10 from a sponsor. How many kilometers does each student walk?

Alana:

Gilberto:

Leanne:

7. Do any of the pledge plans represent a proportional relationship? Explain.

8. Do any of the pledge plans represent a linear relationship? Explain.