

Assignment 27

1. Steven and Michelle are starting a stamp collection. The number of stamps Steven has is shown in the table and the number of stamps Michelle has is given by the equation.

Steven

Weeks	Number of Stamps
0	20
2	44
6	92
10	140

Michelle

$$s = 15w$$

where w = weeks and
 s = number of stamps

- a) What does the y intercept in this particular example represent?

- b) Graph the two students' functions below:

- c) Who collects stamps at a faster rate? Show how you know.

- d) How long does it take Michelle to catch up with Steven?
Show how you know.

- e) What is the difference in the number of stamps in the students' collections after 30 weeks?

- f) Is one of these relationships a direct variation? Which one? How do you know?

