

1. A publisher wants to print a magazine. Pete’s Printing will charge the publisher \$300 set up charges plus \$3.50 per bundle of magazines. Margo’s Magazines will charge the publisher \$400 set up charges plus \$3 per bundle of magazines.

a. There are two variables; the number of bundles of magazines that the publisher orders and the cost of these bundles. Which one is the independent variable? Why do you say this?

b. Fill in the table to calculate the costs for different number of bundles being printed by Pete’s Printing.

Cost of Bundles from Pete’s Printing

Bundles Printed	Process	Cost in dollars
30		
60		
90		
		\$545
x		y

How do you know the relationship between bundles and cost is a function?

c. Fill in the table to calculate the costs for different number of bundles being printed by Margo’s Magazine.

Cost of Bundles from Margo’s Magazines

Bundles Printed	Process	Cost in dollars
30		
60		
90		
		\$595
x		y

d. Use your function rule for Margo’s Magazine to calculate the following:

- The cost of 118 bundles.

The number of bundles that can be printed for \$850.

2. Use the function rules for Pete's Printing and Margo's Magazines to determine the cost of ordering 150, 200, and 250 bundles from each printer.

Number of bundles	Pete's Printing	Margo's Magazines
150		
200		
250		

Which printer do you think the publisher will use if they need to order 190 bundles? Justify your answer.

3.