

**Learning Target: (2C) I can graph revenue and cost functions on the same graph for the purpose of analyses.**

**Skills to Look For:**

\_\_\_ **[Graphing Cost and Revenue]**

+ I can create a table of data by evaluating (plugging into) both cost and revenue functions.

+ I plot points to represent both functions on the same graph

\_\_\_ **[Thinking about Profit by comparing Cost and Revenue]**


+ I can use the graph to see the "big picture" of what is happening for the business.

+ I can write sentences describing when the business will have positive profit, negative profit or zero profit!

### Business 2: Street Beverage Entrepreneur

Fixed Costs	Variable Costs
-Transportation costs \$50 per week.	-Each beverage costs \$1.15 to make
-The business spends \$30 on ice per week.	-The bottle for each beverage costs \$0.65

*Cost Function*

  $C(x) = 1.80x + 80$

*Revenue Function*

The business plans to sell each beverage for \$5.00   $R(x) = 5x$

1) Complete the table of values below to compare cost and revenue:

X (number of bevs sold)	R(x)	C(x)
10	$R(10)=5 \cdot 10=50$	$C(10)=1 \cdot 8(10)+80=98$
20	$R(20)=5 \cdot 20=100$	$C(20)=1 \cdot 8(20)+80=116$
30	$R(30)=5 \cdot 30=150$	$C(30)=1 \cdot 8(30)+80=134$
40	$R(40)=5 \cdot 40=200$	$C(40)=1 \cdot 8(40)+80=152$
50	$R(50)=5 \cdot 50=250$	$C(50)=1 \cdot 8(50)+80=170$