

Long Distance Phone Plans

Phone companies offer different long distance phone Plans depending on the number of minutes per month that you use your phone for long distance phone calls. Following are several plans.

AT&T	10¢ per minute Plan
MCI	\$7.00 per month plus 4¢ per minute Plan
BellSouth	\$24.00 per month for the Unlimited Calling Plan

Which Plan is the BEST Plan? There's no one correct answer. It all depends on how many long distance minutes you use during the month.

Use the Rule of Five to Analyze the Different Plans

1. Analyze Numerically
2. Analyze Graphically
3. Analyze Algebraically
4. Using your Graphing Calculator
5. Use Complete Sentences to State Your Conclusion

Analyze Numerically

Organize the following information in a Table to help you decide which Plan is the best Plan if you:

- A) Don't make any long distance phone calls during the month.
- B) Make 1 hr. (60 minutes) of long distance phone calls per month.
- C) Make 2 hr. of long distance phone calls per month.
- D) Make 3 hr. of long distance phone calls per month.
- E) Make 5 hr. of long distance phone calls per month.

Analyze Graphically

Graph each of the Plans on the same grid by plotting points from your numerical data (Table).

Assume that you will not call more than 10 hr. (600 minutes) per month.

Essential criteria for an effective graph include:

- Title
- Label your axes, include units
- Label your graphs, or use a legend

Graphing Calculator

Define a function for each of the Plans; then graph them on your graphing calculator in the same window. Then press **2nd CALC** and select **5: intersect** to determine the points of intersection.

Analyze Algebraically

Algebraically solve two systems of equations to determine the points of intersection.

Complete Sentences

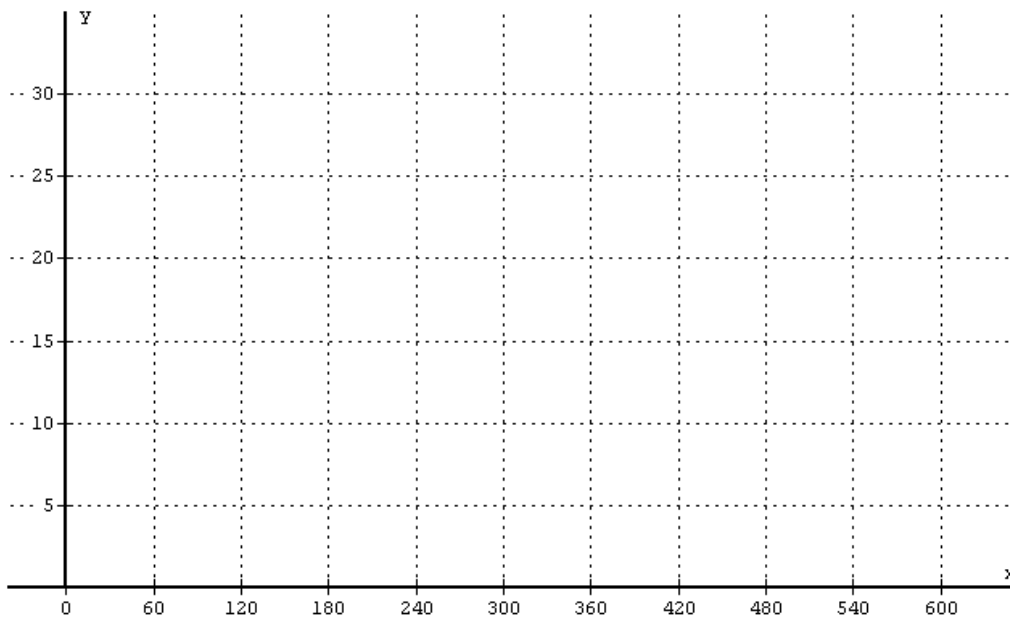
State your conclusions in complete sentences.

- When is AT&T the best Plan?
- When is MCI the best Plan?
- At what point would it be worth it to choose BellSouth's Unlimited Calling Plan?

Long Distance Phone Plans

Number of Minutes Used per Month	AT&T 10¢ per minute Plan	MCI \$7.00 per month plus 4¢ per minute Plan	BellSouth \$24.00 per month Unlimited Calling Plan
0 min.			
60 min.			
120 min.			
180 min.			
300 min.			
Generalize: X min.			

GRAPHICALLY



ALGEBRAICALLY / ELECTRONICALLY

$$\text{AT\&T} = \text{MCI}$$

$$\text{MCI} = \text{BELLSOUTH}$$

VERBALLY: Which Plan is the BEST Plan?