

School-to-Career Activity

(Use with Lesson 3-6)

Telephone Maintenance Technician

Acme Telephones sells and maintains office building telephone systems to large businesses. Suppose you are a telephone system maintenance technician for Acme Telephones. Each month you are responsible for performing a routine system check at the office of each Acme customer in Cedar City. You must fly to Cedar City and rent a car to make your rounds.

You have the following rental car options.

Zippy Rent-A-Car

Rates: (Compact Car)

\$10 per day
plus
\$0.30 per mile

Cedar City Car Rentals

Rates: (Compact Car)

\$15 per day
plus
\$0.20 per mile

1. Suppose you know that your rounds will take 3 days. You must get special permission from your home office to spend more than \$100 on transportation on trips lasting fewer than 4 days. With which rental car company can you drive more miles if you spend only \$100? Explain.
2. Suppose you travel a fixed distance of 200 miles on your rounds in Cedar City. You know that several customers are having problems with their telephone systems that you will have to work on. However, you don't know how long repairs will take. If you can spend \$160 on car rental, which company will allow you a longer stay? Explain.
3. On your last trip to Cedar City, you noticed that a third rental car company, Easy Auto Rentals, had just opened for business. Easy Auto Rentals offers a compact car for \$20 per day with unlimited mileage. You know that the next time that you travel to Cedar City, your trip will take 4 days and you estimate that you will travel 250 miles. Which company offers the best deal for these conditions? Explain.