

PRACTICE ♦ Renting a Car

9.5

Use the rate table at the right. Find the rental cost.
Remember to estimate whenever you use your calculator.

1. Car: Luxury
Days: 3
Mileage: 565

2. Car: Compact
Days: 2
Mileage: 278

3. Car: Van
Days: 5
Mileage: 846

4. Car: Midsize
Days: 4
Mileage: 682

5. Car: Compact
Days: 6
Mileage: 1,015

6. Car: Luxury
Days: 1
Mileage: 113

7. Car: Midsize
Days: 5
Mileage: 908

8. Car: Van
Days: 7
Mileage: 2,500

A-1 RENT-A-CAR		
Car	Daily rate	Cost per mile
Compact	\$28	\$0.28
Midsize	\$35	\$0.32
Luxury	\$40	\$0.36
Van	\$49	\$0.42
100 FREE MILES EACH DAY		

Complete the table.

Car	Luxury	Midsize	Compact	Van	Luxury
Odometer begin	5,684	10,329	18,947	21,864	25,600
Odometer end	6,019	10,925	19,845	22,002	26,200
Days	2	5	4	1	1
Daily cost	9.	13.	17.	21.	25.
Chargeable mileage	10.	14.	18.	22.	26.
Mileage charge	11.	15.	19.	23.	27.
Total cost	12.	16.	20.	24.	28.

Use the rate table above. Approximate the rental cost.

29. Mark is going to rent a compact car to travel from Philadelphia to Boston and back. The 1-way mileage is about 300 mi. The trip will take 2 d. _____

30. Vera plans to rent a midsize car to drive from New York to Cleveland and back. The estimated 1-way mileage is 500 mi. The trip will take 3 d. _____

31. Joanne is going to rent a midsize car to drive from Chicago to New York and back. The estimated 1-way mileage is 675 mi. The trip will take 2 d. _____

32. The Rosners plan to rent a luxury car to drive from New York to Orlando. The estimated mileage is 1,340 mi. The trip will take 3 d. _____

PRACTICE ♦ Decision Making: Choosing a New Car

9.6

Victor listed the features of 3 cars he would consider buying to help him choose one.

Car X	Price: \$13,708.65	Mpg: 20	Regular unleaded @ \$1.026 per gal
	Estimated maintenance and repair for 3 y: \$1,950	Insurance: \$1,548 per y	
	Safety: Good driver protection	Moderate passenger protection	
Car Y	Price: \$14,352.20	Mpg: 23	Economy unleaded @ \$1.016 per gal
	Estimated maintenance and repair for 3 y: \$2,068	Insurance: \$1,425 per y	
	Safety: Good driver protection	Good passenger protection	
Car Z	Price: \$12,686.00	Mpg: 19	Super unleaded @ \$1.132 per gal
	Estimated maintenance and repair for 3 y: \$2,185	Insurance: \$1,346 per y	
	Safety: Moderate driver protection	Moderate passenger protection	

Compare the 3 cars by completing the table.

- Assume that Victor will drive 20,000 mi per y.
- Victor will put \$3,000 down and finance the rest with a 3-y loan at 7.9%.
Use the monthly payment table on page 171 of your textbook.
- To find the total annual car expenses:
Add one year's car payments, the cost of gasoline for a year, the cost of insurance for a year, and $\frac{1}{3}$ of the maintenance and repair costs.
- To find the cost per mile, divide the annual expenses by 20,000.

Factors	Car X	Car Y	Car Z
Price	1.	2.	\$12,686.00
Monthly loan payment	3.	\$355.32	4.
Gas costs for 1 y	\$1,026.00	5.	6.
Maint./repair costs for 1 y	7.	\$689.33	8.
Total annual expenses	9.	10.	\$5,557.95
Cost per mile	\$0.28	11.	12.
Safety	13.	Good	14.

Which car should Victor buy if the only factor were:

15. Price? _____ 16. Monthly loan payment? _____ 17. Safety? _____
18. How much would Victor save each year on the car with the lowest annual expense over the car with the highest annual expense? _____
19. How much lower would his monthly payments be if he bought Car Z instead of Car X? _____
20. How much would he save on gasoline each year if he bought Car X instead of Car Z? _____