

**PRACTICE** ♦ Automobile Operating Expenses**9.3**

Find the mileage. Estimate the mpg.

Remember to estimate whenever you use your calculator.

	Car A	Car B	Car C	Car D	Car E	Car F
<b>1st odometer reading</b>	854	12,533	16,729	23,681	964	57,300
<b>2nd odometer reading</b>	1,076	18,705	21,595	26,571	1,039	63,500
<b>Miles driven</b>	1.	3.	5.	7.	9.	11.
<b>Gallons of gasoline used</b>	12	280	191	208	5	310
<b>Mpg</b>	2.	4.	6.	8.	10.	12.

Find the approximate cost of gasoline for a 600-mi trip. Round up to the nearest ten dollars. Use the estimated mpg from the table above.

	Car A	Car B	Car C	Car D	Car E	Car F
<b>Brand Y \$0.928/gal</b>	13.	15.	17.	19.	21.	23.
<b>Brand Z \$1.179/gal</b>	14.	16.	18.	20.	22.	24.

Solve.

25. Rudy's car needs repairs on the alternator at a cost of \$268 and the starter at a cost of \$246. There is an 8% sales tax on the cost of repairs. What is the total cost?  
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26. Carol takes her car in to have the water pump fixed for \$185 and the brake pads repaired for \$128. There is an 8.5% sales tax on the cost of repairs. What is the total cost?  
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27. Alex's pick-up truck needs a new water pump that costs \$315 and a new starter that costs \$235. There is a 6.75% sales tax on the cost of the repairs. What is the total cost?  
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28. Sharon took her car in to have the alternator fixed for \$120 and the brake pads replaced for \$96. There is a 7.5% sales tax on the cost of the repairs. What is the total cost?  
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The average car depreciates about 38% after 3 y. Find the estimated amount of depreciation and the depreciated value in 3 y.

29. Original cost: \$16,500
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- \_\_\_\_\_

30. Original cost: \$11,990
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- \_\_\_\_\_

31. Original cost: \$34,500
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- \_\_\_\_\_

32. Original cost: \$26,750
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- \_\_\_\_\_

**PRACTICE** ♦ Automobile Insurance

9.4

LIABILITY INSURANCE		Yearly base premium
Type	Amount	
Bodily injury	25/50	\$146.50
	50/100	\$168.25
	100/300	\$178.40
Property damage	25	\$80.40
	50	\$90.20
	100	\$105.60

COLLISION/COMPREHENSIVE YEARLY BASE PREMIUMS		
Deduc.	Collision	Comprehensive
\$50	\$198.45	\$74.60
\$100	\$186.34	\$58.20
\$200	\$142.68	Not available

Use the rate tables above. Find the total yearly base premium.  
Remember to estimate whenever you use your calculator.

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|--|---|
| <b>1. Liability:</b> 25/50/50<br><b>Collision:</b> \$50 deductible<br><b>Comprehensive:</b> \$50 deductible<br><hr/> | <b>2. Liability:</b> 50/100/100<br><b>Collision:</b> \$200 deductible<br><b>Comprehensive:</b> \$50 deductible<br><hr/> |
|--|---|

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|---|--|
| <b>3. Liability:</b> 100/300/100<br><b>Collision:</b> \$100 deductible<br><b>Comprehensive:</b> \$100 deductible<br><hr/> | <b>4. Liability:</b> 50/100/50<br><b>Collision:</b> \$50 deductible<br><b>Comprehensive:</b> \$100 deductible<br><hr/> |
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Use the rating factors graph on page 176 of your textbook. Find the rating factor.

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|--|---|---|
| <b>5. Unmarried female, 24</b><br>Drives parents' car<br><hr/> | <b>6. Unmarried male, 28</b><br>Drives own car<br><hr/> | <b>7. Unmarried male, 20</b><br>Drives own car<br><hr/> |
|--|---|---|

Complete the table. Assume a \$100 Comprehensive deductible for each driver.

Driver	Male, 17, owns car	Female, 17	Male, 18, not owner	Male, 19, owns car	Female, 24, owns car
<b>Liability</b>	25/50/25	50/100/50	100/300/100	50/100/100	50/100/50
<b>Yearly base premium</b>	8.	14.	20.	26.	32.
<b>Collision deductible</b>	\$50	\$100	\$100	\$200	\$50
<b>Yearly base premium</b>	9.	15.	21.	27.	33.
<b>Comprehensive deductible</b>	10.	16.	22.	28.	34.
<b>Total base premium</b>	11.	17.	23.	29.	35.
<b>Rating factor</b>	12.	18.	24.	30.	36.
<b>Total premium</b>	13.	19.	25.	31.	37.