

LESSON
4

Solve Math Problems

Objective Solve problems using function tables.

Learn to Solve Problems

Problem Jack's Kennel charges \$5 a day to keep a dog, plus a \$25 registration fee. Mary's Kennel charges \$10 per day, plus a registration fee of \$10. Marco needs to put his dog in a kennel for 5 days. Which kennel will charge less money?

	Think	Write																																				
Step 1:	Read the problem. Underline the question. Tell what you have to do.	I have to compare the costs for the 2 kennels. The costs are related to the number of days, so I can use function tables.																																				
Step 2:	Circle the facts. Write expressions.	Jack's Kennel charges \$5 a day plus \$25. The total cost is \$5 times the number of days, plus \$25. So $c = 5d + 25$. Mary's Kennel charges \$10 per day plus \$10. The total cost is \$10 times the number of days, plus \$10. So $c = 10d + 10$.																																				
Step 3:	Make function tables.	<table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr> <th colspan="6">Jack's Kennel</th> </tr> <tr> <th>input (d)</th> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <th>output (c)</th> <td>30</td> <td>35</td> <td>40</td> <td>45</td> <td>50</td> </tr> </thead> </table> <table border="1" style="display: inline-table;"> <thead> <tr> <th colspan="6">Mary's Kennel</th> </tr> <tr> <th>input (d)</th> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <th>output (c)</th> <td>20</td> <td>30</td> <td>40</td> <td>50</td> <td>60</td> </tr> </thead> </table>	Jack's Kennel						input (d)	1	2	3	4	5	output (c)	30	35	40	45	50	Mary's Kennel						input (d)	1	2	3	4	5	output (c)	20	30	40	50	60
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Step 4:	Solve the problem.	When $d = 5$, $c = 50$ for Jack's Kennel and 60 for Mary's Kennel. Jack's Kennel will charge less money for 5 days.																																				



Practice Solving Math Problems

Directions Follow steps 1 to 4 above to solve the problems below. On a separate sheet of paper, write expressions, draw function tables, and answer in complete sentences.

- Stefan has a savings account. He puts \$125 in the account to start. Then he deposits \$30 at the end of every month. How much money will be in the account after 6 months?
- Five friends want to see a show. Tickets to the show cost \$7 and parking costs \$2 per car. If the friends all ride in the same car, how much money will they spend?
- Soje charges \$8 an hour to help people set up their computers. Ashin charges \$7 an hour, plus bus fare of \$5 each day. Ms. Gibbs wants to hire someone for 8 hours. Who charges less?