

Algebra Concepts – Unit 2, Lesson 4

Practice with the part-whole model

After the first three lessons of this unit you have the tools to solve the following kinds of problems:

- Models involving addition and subtraction
- Models involving multiplication and division
- Models involving two-step linear functions

You also can find different pieces of the model that are missing such as:

- The whole
- The number of parts
- The value of each part

If you become proficient with building the models you will in turn become proficient at solving many different types of real world problems.

So let's practice! **Build a model** for each situation and find a solution to the problem.

Remember, here is what a typical model looks like.

|-----Whole-----|

Part	Part	Part
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1. Jenny is a huge shopping fan. She plans to shop 25 times after school before Christmas. So far Jenny has shopped 2 times last week and 3 times this week. How many additional days does Jenny need to shop to reach her goal?

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2. David has set a goal to save \$200 for his Algebra teacher's Christmas presents. So far, he has saved \$25. How much does David have left to save?

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3. Sarah just bought a new aquarium. It has a maximum capacity of 29 fish. She plans to stock it with new fish slowly over the course of a month. This week she will buy 5 fish. Next week she will buy 4 fish and the week after that she will buy 6. How many fish will she buy the last week?

Build your own model

4. Dylan bought 2 new shirts for the same price at Pac Sun. He had \$40 when he left the house. After buying the shirts, Dylan had \$6.75 left. How much was each shirt?

5. Nate worked for 6 hours at Cranmore. It cost Nate \$5 in gas to get to work. He had \$57 in net earnings after he paid for the gas. How much did Nate earn per hour?

6. Mr. Lamneck's dad played 9 holes of golf recently. He shot the same score for the first 7 holes. He scored a 4 on the eighth hole and a 3 on the ninth hole. His total score for the 9 holes was a 35. What was his score for each of the first 7 holes?