A Plan for Problem Solving

EXAMPLES **Use the Problem-Solving Plan**

MAIN IDEA

- Solve problems using the four-step plan.

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1 MONEY **After shopping at the mall, you came home with $3. You spent $4 on candy, $8 on a movie, and $5 on arcade games. How much money did you start with?**

UNDERSTAND You know the amount of money that was spent on each item at the mall as well as the amount of money left over. You need to find how much money you started with.

PLAN To find the total amount of money that was started with, ☐ the amount spent on each item at the mall along with the amount left over.

SOLVE ☐

You started with ☐.

CHECK The answer seems ☐. To check it, ☐ all of the money spent at the mall and confirm that $3 is left over.

☐

REMEMBER IT

Remember to check the reasonableness of your answer by comparing it to your estimate.

Check Your Progress **HOCKEY** During the regular season, David scored 18 more goals than Bobby. Bobby scored 14 goals. How many goals did David score during the regular season?
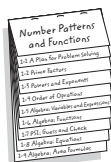
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1 **COOKING** Based on the the information in the table, how many cups of cooked rice and how many servings will 4 cups of dry rice provide?

Dry Rice (cups)	Cooked Rice (cups)	Servings
1	2	8
2	4	16
3	6	24
4	?	?

FOLDABLES

ORGANIZE IT

On the Lesson 1-1 tab, list the steps of the four-step plan for problem solving. Then explain each step in your own words.

Number Patterns and Functions
- 1-1 A Plan for Problem Solving
- 1-2 Prime Factors
- 1-3 Powers and Exponents
- 1-4 Order of Operations
- 1-5 Algebra: Variables and Expressions
- 1-6 Algebra: Functions
- 1-7 PSI: Guess and Check
- 1-8 Algebra: Equations
- 1-9 Algebra: Area Formulas

UNDERSTAND You know the cups of cooked rice and the number of servings for 1, 2, and 3 cups of dry rice. You need to find the cups of cooked rice and the number of servings for 4 cups of dry rice.

PLAN Since an exact answer is needed and the question contains a patten, use mental math.

SOLVE

2   4   6   ?

+ ▢   + ▢

The pattern shows an increase of ▢ cups of cooked rice for each additional cup of dry rice.

So, for 4 cups of dry rice you would get ▢ cups of cooked rice.

8   16   24   ?

+ ▢   + ▢

The pattern shows an increase of ▢ servings for each additional cup of dry rice.

So, for 4 cups of dry rice you would get ▢ servings of cooked rice.

CHECK Since $8 - 2 = 6$ and $32 - 8 = 24$, the answer is correct.

Check Your Progress **EXERCISE** Based on the information in the table, determine how many minutes per day will be spent working out during week 5.

Week	Minutes Per Day
1	10
2	15
3	21
4	28
5	?

HOMEWORK ASSIGNMENT

Page(s):

Exercises: