SCHOLASTIC

DynaMath

NAME _____

Word Problems With Unknowns

Choose a variable to write an equation with an unknown for each word problem. Then solve for the unknown. Rewrite your answer as a complete statement. We did the first one for you.

1 Deena is 12 years old. Her sister Aimee is 4 years old. How many times older is Deena than Aimee?

$$4 \times a = 12 \qquad\qquad a = 3$$

Statement: _Deena is 3 times older than Aimee._

2 Every 2 weeks, Ari borrows 6 nonfiction books and 2 fiction books from the library. How many times greater is the number of nonfiction books he checks out compared with the number of fiction books?

Statement: _____

3 In 1 hour, a movie theater sold 45 popcorn bags and 9 boxes of chocolate-covered raisins. How many times greater is the number of popcorn bags sold than chocolate-covered raisins?

Statement: _____

4 It takes Pamela 3 lemons to make a glass of lemonade. She uses 7 times as many lemons to make a pitcher of lemonade. How many lemons does Pamela use in a pitcher?

Statement: _____

5 Tanisha is practicing her pitching for softball. She throws 4 times as many strikes as she does balls. If she throws 32 strikes, how many balls does she throw?

Statement: _____

6 Julius was counting the change in his piggy bank. He had 4 quarters and 2 dimes. How many times more is the total value of the quarters compared with the total value of the dimes? (Hint: Compare total values in cents.)

Statement: _____

BONUS: Write your own word problem that includes an unknown on the back of this paper. Swap your problem with a partner's and solve.