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Partner Name $\qquad$

## USING VISUAL MODELS TO UNDERSTAND AND SOLVE ALGEBRA PROBLEMS

\# Read each problem carefully.
\# Underline all words or phrases which indicate quantities, operations or relationships.
\# Record all information; if possible show your information using a sketch.
\# Indicate the value of any known quantities; represent any unknown quantities with variables. \# Write an equation which states the relationships in the problem.

DO NOT SOLVE THE PROBLEMS!!

1. Two pages that face each other in a book have 253 as the sum of their page numbers. What are the page numbers?

Show your information here:
State your equation here:

2. A soccer field is twice as long as it is wide. If the perimeter is 300 yards, what are the field's dimensions?

Show your information here:
State your equation here:

3. Find the cost per pound of a trail mix made from 40 pounds of raisins that cost $\$ 4.40$ per pound and 100 pounds of granola that costs $\$ 2.30$ per pound?

Show your information here:
State your equation here:

4. Two cars leave cities that are 315 miles apart and travel toward each other. One car travels at 50 mph and the second car travels at 55 mph . How long will it take them to meet?

Show your information here:
State your equation here:

## PROBLEM SOLVING

Show the complete solutions to any two of the previous four problems.
SHOW ALL WORK !! Solve your equations. Answer all questions. Check all solutions.
\# $\qquad$ .
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