NAME _____

Lesson 3.3 Creating Expressions to Solve Problems

Write expressions to solve problems by putting the unknown number, or **variable**, on one side of the equation and the known values on the other side of the equation. Then, solve for the value of the variable.

Francine is making earrings and necklaces for six friends. Each pair of earrings uses 6 centimeters of wire and each necklace uses 30 centimeters. How much wire will Francine use?

Let w represent the amount of wire used.
Equation: $w = 6 \times (6 + 30)$
Another way of writing this expression is: $w = (6 \times 6) + (6 \times 30)$
How much wire did Francine use? $w = 216$ centimeters

SHOW YOUR WORK

Solve each problem.

1. A jaguar can run 40 miles per hour while a giraffe can run 32 miles per hour. If they both run for 4 hours, how much farther will the jaguar run?

Let d represent the distance.

Equation: _____

Another way of writing this is: _____

The jaguar will run _____ miles farther.

1.

2. Charlene sold 15 magazine subscriptions for the school fundraiser. Mark sold 17 subscriptions and Paul sold 12. How many magazine subscriptions did they sell in all?

Let s represent subscriptions.

Equation: _____

Another way of writing this is: _____

They sold _____ subscriptions in all.

2.

3. Shara bought 3 bags of chocolate candies for $1.25 each and 3 bags of gummy bears for $2.00 each. How much did she spend in all?

Let m represent the money spent.

Equation: _____

Another way of writing this is: _____

Shara spent _____ on candy.

3.