

Name: \_\_\_\_\_

School: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

Solving for Variables: Problem Solving

**Answer the following questions in complete sentences. Write the expression in the space provided and show working where possible.**

1. A flight has 194 seats. After  $n$  tickets are sold for this flight, 38 seats are available. Find  $n$ .

*Expression:*

*Rough work:*

*Answer:*

2. Josh sent out invitations to 16 friends for his birthday party.  $x$  friends replied and he is waiting for the other 7 friends to reply. Find  $x$ .

*Expression:*

*Rough Work:*

*Answer:*

3. Ashley bought 2 boxes of small toys of party favors for her daughter's birthday party. The bigger box contains  $t$  toys and the smaller box contains 12 toys. She bought a total of 28 toys. Find  $t$ .

*Expression:*

*Rough Work:*

*Answer:*

4. Myrna used her 2 year-warranty cards for repairs to the 3 defective laptops from her order of 18 laptops. The other  $m$  laptops are working properly. Solve for  $m$ .

*Expression:*

*Rough Work:*

*Answer:*

5. The original price of the portable speaker is \$46 and the portable fan is \$32. Carina paid \$38 for portable speakers after getting a discount of  $k$ . Solve for  $k$ .

*Expression:*

*Rough Work:*

*Answer:*