Variables and equations
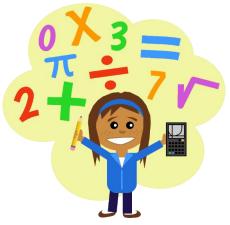
1. There are 22 permission slips on the teacher's desk. If the teacher signed 8 slips, how many more slips are left to sign?

2. Merilyn read some books over the summer. She read 6 in July and 11 in August. How many did she read in total?

3. Charlotte has some money, and her sister has $2 less than Charlotte. If her sister has $13, how much money does Charlotte has?

4. Michael is working on a puzzle. He finishes placing 63 pieces and still has 37 pieces left. How many pieces of puzzle are there in total?

5. There were 15 mugs in the pantry. Ashley broke 3 mugs and bought some more to replace them. If there are 19 mugs in the pantry now, how many mugs did Ashely buy?

6. There are some packs of cookies on the shelf in the bakery. 8 packs are chocolate chips, which is 9 packs less than the number of raisins oatmeal packs. How many packs of cookies are there?

Answers

Note: there are several possible correct equations for each problem.

1. $x = 22 - 8$
   $x = 14$
   There are 14 slips left to sign.

2. $x = 6 + 11$
   $x = 17$
   She read 17 books in total.

3. $x - 2 = 13$
   $x = 15$
   Charlotte has $15.

4. $x = 63 + 37$
   $x = 100$
   There are 100 pieces of puzzle in total.

5. $15 - 3 + x = 19$
   $x = 7$
   Ashely bought 7 mugs.

6. x = number of oatmeal raisin packs
   $x = 8 + 9 = 17$
   Total number of packs = $8 + x = 8 + 17 = 25$
   There are 25 packs of cookies.