

MAC1105 College Algebra
1.2 Practice Problems

1. Write the phrase as a mathematical expression. “Three more than two times a number.”
2. Write the phrase as a mathematical expression. “Two less than three times a number.”
3. Write the phrase as a mathematical equation. “One less than a number equals twice the sum of the number and three.”
4. Solve the problem algebraically.
One number is 3 more than twice the other number. If the sum of the two numbers is 33, find the two numbers.
5. Solve the problem algebraically.
The sum of three consecutive integers is 36. Find the integers.
6. Solve the problem algebraically.
A child has \$3.40 in his piggy bank. She has 4 fewer nickels than quarters and five times as many dimes as nickels. Find how many of each type of coin the child has.

7. Solve the problem algebraically.

Cheryl Norris invested part of her \$35,000 advance at 5% annual simple interest and the rest at 4% annual simple interest. If her total yearly interest from both accounts was \$1,700, find the amount invested at each rate.

8. Solve the problem algebraically.

Shirley traveled 6 hours to Lake Sinclair, a total of 315 miles. She took a train part way of the way, which averaged 50 miles per hour and then took the bus the remaining distance, which averaged 65 miles per hour. How long was Shirley on the train?

9. Solve the problem algebraically.

It takes Tom 2 times longer than Jr. to lath the house. Together they can lath the house in 16 hours. How long would it take each man to lath the house by himself.

10. Solve the problem algebraically.

The manager of a coffee shop plans to mix a more expensive coffee bean that cost \$9 per pound with a less expensive coffee bean that cost \$5 per pound to create a 140-pound blend that will sell for \$5.80 per pound. How many pounds of each type of coffee bean are required?