

Student: _____
Date: _____
Time: _____

Instructor: courtney trabue
Course: GMC LSS Mathematics
Book: Martin-Gay: Developmental
Mathematics

Assignment: MAT 097 Intro to Problem
Solving (94)

1. Twice the difference of a number and 4 is equal to three times the sum of the number and 4. Find the number.

The number is .

2. The product of twice a number and four is the same as the difference of seven times the number and $\frac{5}{7}$. Find the number.

The number is .

3. The left and right page numbers of an open book are two consecutive integers whose sum is 47. Find these page numbers.

The smaller page number is

The larger page number is .

4. A 48-inch board is to be cut into three pieces so that the second piece is twice as long as the first piece and the third piece is 3 times as long as the first piece. If x represents the length of the first piece, find the lengths of all three pieces.

The first piece is inches long.

The second piece is inches long.

The third piece is inches long.

5. A car rental agency advertised renting a car for \$23.95 per day and \$0.26 per mile. If David rents this car for 4 days, how many whole miles can he drive on a \$200 budget?

miles (Round down to the nearest whole mile.)

6. In one U.S. city, the taxi cost is \$4 plus \$0.90 per mile. If you are traveling from the airport, there is an additional charge of \$3.50 for tolls. How far can you travel from the airport by taxi for \$1.50?

You can travel miles.

Student: _____
Date: _____
Time: _____

Instructor: courtney trabue
Course: GMC LSS Mathematics
Book: Martin-Gay: Developmental
Mathematics

Assignment: MAT 097 Intro to Problem
Solving (94)

7. A 17-foot piece of string is cut into two pieces so that one piece is 5 feet longer than twice the shorter piece. If the shorter piece is x feet long, find the lengths of both pieces.
- The shorter piece is feet long.
- The longer piece is feet long.
-
8. Two angles are supplementary if their sum is 180° . One angle measures five times the measure of a smaller angle. If x represents the measure of the smaller angle and these two angles are supplementary, find the measure of each angle.
- The smaller angle is degrees.
- The larger angle is degrees.
-
9. Three good friends are in the same Algebra class. Their scores on a recent test are three consecutive even integers whose sum is 258. Find each score.
- (Use commas to separate answers.)
-
10. The sum of $\frac{29}{6}$ and three times a number is equal to $\frac{7}{6}$ subtracted from four times the number. Find the number.
- The number is .
-
11. A car rental company charges a daily rate of \$41 plus \$0.40 per mile for a certain car. Suppose that you rent that car for a day and your bill (before taxes) is \$169. How many miles did you drive?
- miles
-
12. During the 2005 football season, Team Tackle beat Team Sack by 32 points. If their combined scores totaled 64, find the individual team scores.
- Team Tackle's score was points.
- Team Sack's score was points.

Student: _____
Date: _____
Time: _____

Instructor: courtney trabue
Course: GMC LSS Mathematics
Book: Martin-Gay: Developmental
Mathematics

Assignment: MAT 097 Intro to Problem
Solving (94)

13. The number of counties in state A and the number of counties in state B are consecutive even integers whose sum is 130. If state A has more counties than state B, how many counties does each state have?

State A has counties.

State B has counties.

14. After a recent election, there were 8 more Republican governors than Democratic governors in the United States. If there are 50 state governors total, how many Democrats and how many Republicans held governor's offices after this election?

Democratic governors

Republican governors

15. If the sum of a number and seven is tripled the result is nine less than twice the number. Find the number.

$x =$

16. The area of a certain state (State 1) is three times the area of another state (State 2). If the sum of their areas is 20,000,000 square miles, find the area of each state.

Area of State 1: square miles

Area of State 2: square miles

17. In a recent election Corrine Brown received 13,127 more votes than Bill Randall. If the total number of votes was 119,911, find the number of votes for each candidate.

Corrine Brown received votes.

Bill Randall received votes.