

Math 93–More Word Problems–page 1

Set up and solve the following. Follow all steps as given during classtime.

1. Together, a street and driveway total 55 feet. The street is 17 feet longer than the driveway. How long is each?
2. Jo is 5 years older than Mike. Together, their ages total 29 years. How old is Jo?
3. A psychology book costs \$25 less than a math book. Together, they cost \$281. Find the cost of each one.
4. Together, a brownie and slice of pizza have 948 calories. The brownie has 32 calories less than the slice of pizza. How many calories are in the slice of pizza?
5. Lynn is twice as tall as Mary. Together, they measure 72 inches. How tall is each one?
6. Gloria and Jean went shopping and spent a total of \$500. If Jean spent four times what Gloria spent, how much did each person spend?
7. Greg walked 4 miles more than 3 times what Jack walked. Together, they walked a total of 32 miles. How far did each one walk?
8. The temperature in Las Vegas was 18 degrees more than four times the temperature in Omaha. If the sum of the temperatures was 108 degrees, what was the temperature in each city?
9. A newer home has 380 square feet less than twice the square feet of an older home. If the total of the square feet in the two homes is 2980 square feet, find the number of square feet in the newer home.
10. Together, a nylon jacket and a wool coat cost \$176. If the wool coat costs \$24 less than 7 times the nylon jacket, find the cost of each one.

Math 93–More Word Problems–page 2

Answer Key.

1. driveway = $x = 19$ feet
street = $x + 17 = 36$ feet
driveway + street = 55
 $(x) + (x + 17) = 55$
The driveway is 19 feet; the street is 36 feet.
2. Mike = $x = 12$ years
Jo = $x + 5 = 17$ years
Mike + Jo = 29
 $(x) + (x + 5) = 29$
Jo is 17 years old.
3. math book = $x = \$153$
psych book = $x - 25 = \$128$
math bk + psych bk = 281
 $(x) + (x - 25) = 281$
**The math book cost \$153;
the psych book cost \$128.**
4. pizza slice = $x = 490$ calories
brownie = $x - 32 = 458$ calories
pizza + brownie = 948
 $(x) + (x - 32) = 948$
There are 490 calories in the pizza slice.
5. Mary = $x = 24$ inches
Lynn = $2x = 48$ inches
Mary + Lynn = 72
 $(x) + (2x) = 72$
**Mary is 24 inches tall;
Lynn is 48 inches tall.**
6. Gloria = $x = \$100$
Jean = $4x = \$400$
Gloria + Jean = 500
 $(x) + (4x) = 500$
Gloria spent \$100; Jean spent \$400.
7. Jack = $x = 7$ miles
Greg = $3x + 4 = 25$ miles
Jack + Greg = 32
 $(x) + (3x + 4) = 32$
Jack walked 7 miles; Greg walked 25 miles.
8. Omaha temp = $x = 18$ degrees
Las Vegas temp = $4x + 18 = 90$ degrees
Omaha + Las Vegas = 108
 $(x) + (4x + 18) = 108$
**Omaha's temperature was 18 degrees;
Las Vegas' temperature was 90 degrees.**
9. older home = $x = 1120$ sq ft
newer home = $2x - 380 = 1860$ sq ft
older + newer = 2980
 $(x) + (2x - 380) = 2980$
**The older home has 1120 sq ft;
the newer home has 1860 sq ft.**
10. nylon jacket = $x = \$41$
wool coat = $7x - 24 = \$263$
jacket + coat = 176
 $(x) + (7x - 24) = 176$
**The nylon jacket cost \$25;
the wool coat cost \$151.**