

Name \_\_\_\_\_

Date \_\_\_\_\_

### Writing and Solving Equations

1) During the snow storm Ryan threw snowballs at me. Greyson threw twice as many snowballs as Ryan. Matt threw 8 more snowballs than Ryan. Altogether they threw 28 snowballs at me.

Write an **expression** to represent the number of snowballs thrown by each boy.

Ryan \_\_\_\_\_

Greyson \_\_\_\_\_

Matt \_\_\_\_\_

Write an **equation** for the total number of snowballs thrown and solve.

Equation:

Solve:

Plug back in find the number of snowballs thrown by each boy.

Ryan \_\_\_\_\_

Greyson \_\_\_\_\_

Matt \_\_\_\_\_

Does your answer make sense?

Check:

2) Sydney loves eating treats. Last month she ate three times as many treats as Stella. Ernie ate five more treats than Sydney. Altogether they ate 75 treats.

Write an **expression** to represent the number of treats eaten by each dog.

Stella \_\_\_\_\_ Sydney \_\_\_\_\_ Ernie \_\_\_\_\_

Write an **equation** for the total number of treats eaten and solve.

Equation:

Solve:

Plug back in find the number of treats eaten by each dog.

Stella \_\_\_\_\_ Sydney \_\_\_\_\_ Ernie \_\_\_\_\_

3) Ruthie is collecting shells. She collected some shells on Monday. She collected 12 more shells on Tuesday than she did on Monday. She collected 5 fewer shells on Wednesday than she did on Monday. She had a total of 31 shells after the three days.

Write an **expression** to represent the number of shells she collected each day.

Monday \_\_\_\_\_ Tuesday \_\_\_\_\_ Wednesday \_\_\_\_\_

Write an **equation** for the total number of shells collected and solve.

Equation:

Solve:

Plug back in find the number of shells collected each day.

Monday \_\_\_\_\_ Tuesday \_\_\_\_\_ Wednesday \_\_\_\_\_

4) Louie is driving to Florida. He drove twice as many miles on the second day. He drove 300 fewer miles on the third day than he drove on the second day. He drove a total of 900 miles. Write an **expression** to represent the number of miles he drove each day.

Day One \_\_\_\_\_ Day Two \_\_\_\_\_ Day Three \_\_\_\_\_

Write an **equation** for the total number of miles driven and solve.

Equation:

Solve:

Plug back in find the number of miles driven each day.

Day One \_\_\_\_\_ Day Two \_\_\_\_\_ Day Three \_\_\_\_\_

5) Chris is an avid fisherman. He caught four fewer bass than pickerel. He caught twice as many perch as bass. He caught a total of 20 fish.

Write **expressions** to represent the number of each type of fish caught.

Bass \_\_\_\_\_ Pickerel \_\_\_\_\_ Perch \_\_\_\_\_

Write an **equation** for the total number of fish caught.

Equation:

Solve:

Plug back in find the number of each type of fish caught.

Bass \_\_\_\_\_ Pickerel \_\_\_\_\_ Perch \_\_\_\_\_

6) In order to make a certain type of quilt you need three types of fabric. You need two more yards of the flowered fabric than the solid fabric. You need three times as much striped fabric as flowered fabric. You need a total of  $15\frac{1}{2}$  yards of fabric.

Write **expressions** to represent how much of each type of fabric is needed.

Flowered \_\_\_\_\_ Solid \_\_\_\_\_ Striped \_\_\_\_\_

Write an **equation** for the total number of yards of fabric needed.

Equation:

Solve:

Plug back in find out how much of each type of fabric is needed.

Flowered \_\_\_\_\_ Solid \_\_\_\_\_ Striped \_\_\_\_\_

7) Jimmy needs to fill up his race cars. His Corvette needed 5 fewer gallons than his Camaro. His mustang needed twice as much gas as his Corvette. He needed a total of 52 gallons to fill all three cars.

Write **expressions** to represent the amount of gas needed for each car.

Camaro \_\_\_\_\_ Corvette \_\_\_\_\_ Mustang \_\_\_\_\_

Write an **equation** for the total number gallons needed.

Equation:

Solve:

Plug back in find out how much gas was needed for each car.

Camaro \_\_\_\_\_ Corvette \_\_\_\_\_ Mustang \_\_\_\_\_

8) Matt is searching for bugs under the logs in the backyard. He found three times as many ants as centipedes. He found three fewer spiders than ants. He found a total of 32 insects.

Write **expressions** to represent the number of each type of insect.

Ant \_\_\_\_\_ Spider \_\_\_\_\_ Centipede \_\_\_\_\_

Write an **equation** for the total number of insects.

Equation:

Solve:

Plug back in find out how many of each type of insect was found.

Ant \_\_\_\_\_ Spider \_\_\_\_\_ Centipede \_\_\_\_\_

9) Gail is playing three different sports. She plays soccer for one hour less than she plays football. She plays lacrosse for two hours more than she plays football. She plays sports for a total of ten hours.

Soccer \_\_\_\_\_ Lacrosse \_\_\_\_\_ Football \_\_\_\_\_

Write an **equation** for the total number of hours playing sports.

Equation:

Solve:

Plug back in find out how many hours she spends playing each sport.

Soccer \_\_\_\_\_ Lacrosse \_\_\_\_\_ Football \_\_\_\_\_

10) Greyson loves trucks, cars, and busses. He has twice as many trucks as busses. He has 8 more cars than trucks. He has a total of 68 vehicles.

Trucks \_\_\_\_\_                      Cars \_\_\_\_\_                      Buses \_\_\_\_\_

Write an **equation** for the total number of vehicles Greyson has.

Equation:

Solve:

Plug back in find out how many of each vehicle he has.

Trucks \_\_\_\_\_                      Cars \_\_\_\_\_                      Buses \_\_\_\_\_

11) This winter we have had a lot of snow. We had three times as much snow in February as we had in December. We have 9 fewer inches in January as we had in February. We had a total of 75 inches during the three months.

December \_\_\_\_\_                      January \_\_\_\_\_                      February \_\_\_\_\_

Write an **equation** for the total number of inches of snow.

Equation:

Solve:

Plug back in find out how many inches of snow we got each month.

December \_\_\_\_\_                      January \_\_\_\_\_                      February \_\_\_\_\_

12) Anya, Patti, and Kim are training for a marathon. Anya runs 7 more miles than Patti this week. Kim runs two fewer miles than Anya. Altogether they run 48 miles.

Anya \_\_\_\_\_ Patti \_\_\_\_\_ Kim \_\_\_\_\_

Write an **equation** for the total number of miles the three girls ran.

Equation:

Solve:

Plug back in find out how many miles each girl ran.

Anya \_\_\_\_\_ Patti \_\_\_\_\_ Kim \_\_\_\_\_

13) Jess loves cookies and is baking for a school fundraiser. She bakes four more oatmeal cookies than sugar cookies. She bakes three times as many chocolate chip cookies as oatmeal cookies. She baked a total of 41 cookies.

Chocolate Chip \_\_\_\_\_ Sugar \_\_\_\_\_ Oatmeal \_\_\_\_\_

Write an **equation** for the total number of cookies baked.

Equation:

Solve:

Plug back in find out how many of each type of cookie she baked.

Chocolate Chip \_\_\_\_\_ Sugar \_\_\_\_\_ Oatmeal \_\_\_\_\_