

## EQUATION WORD PROBLEMS - Quiz show

- 1) When 6 is added to four times a number, the result is 50. Find the number.
- 2) The sum of a number and 9 is multiplied by -2 and the answer is -8. Find the number.
- 3) On an algebra test, the highest grade was 42 points higher than the lowest grade. The sum of the two grades was 138. Find the lowest grade.
- 4) At the end of the day, a pharmacist counted and found she has  $\frac{4}{3}$  as many prescriptions for antibiotics as she did for tranquilizers. She had 84 prescriptions for the two types of drugs. How many prescriptions did she have for tranquilizers?
- 5) In a given amount of time, Jamie drove twice as far as Rhonda. Altogether they drove 90 miles. Find the number of miles driven by each.
- 6) Karen works for \$6 an hour. A total of 25% of her salary is deducted for taxes and insurance. She is trying to save \$450 for a new car stereo and speakers. How many hours must she work to take home \$450 if she saves all of her earnings?
- 7) The length of a rectangular map is 15 inches and the perimeter is 50 inches. Find the width.
- 8) The circumference of a circular clock face is 13.12 centimeters more than three times the radius. Find the radius of the face.
- 9) If 4 is subtracted from twice a number, the result is 10 less than the number. Find the number.
- 10) Karin's mom runs a dairy farm. Last year Betty the cow gave 375 gallons less than twice the amount from Bessie the cow. Together, Betty and Bessie produced 1464 gallons of milk. How many gallons did each cow give?
- 11) Twice a number is added to the number and the answer is 90. Find the number.
- 12) John has a board that is 44 inches long. He wishes to cut it into two pieces so that one piece will be 6 inches longer than the other. How long should the shorter piece be?
- 13) Paula received a paycheck of \$585. This amount reflects her weekly earnings less 10% of her earnings for deductions. How much was she paid before deductions were taken out?
- 14) The perimeter of a triangular lot is 72 meters. One side is 16 meters, and the other side is twice the first side. Find the length of the third side.
- 15) In a student election, 584 students voted for one or the other of two candidates for president. If the winner received 122 more votes than the loser, how many votes were cast for each candidate?

16) How many liters of a 10% solution of acid should be added to 20 liters of a 60% solution of acid to obtain a 50% solution?

17) Jim can row his boat upstream at four kilometers per hour, and downstream at six kilometers per hour (Jim is very strong). He rowed upstream a certain distance and then rowed back downstream to his starting point in one hour. How far did he row upstream?

18) A man is nine times as old as his son. In nine years, he will be only three times as old as his son. How old are each now?

19) The Cooking Club made some pies to sell at a basketball game to raise money for the new math books. The cafeteria contributed four pies to the sale. Each pie was then cut into five pieces and sold. There were a total of 60 pieces to sell. How many pies did the club make?

20) I have \$11.60, all dimes and quarters, in my pocket. I have 32 more dimes than quarters. How many dimes, and how many quarters, do I have?

Note: a dime is \$0.10 and a quarter is \$0.25.