

10. Which one of the following are correct steps to find the solution of the inequality

$$\frac{3}{4}x < -12$$

- a. Multiply both sides by $\frac{4}{3}$ and leave the sign $<$
- b. Multiply both sides by $\frac{4}{3}$ and reverse the sign to $>$
- c. Multiply both sides by $\frac{3}{4}$ and leave the sign $<$
- d. Multiply both sides by $\frac{3}{4}$ and reverse the sign to $>$

Translate to an inequality and solve:

11. Find all the numbers such that the sum of twice the number and 18 is greater than or equal to five times the number.
32, 33
12. Rachel and Aaron take turns baby-sitting their little brother. Aaron has baby-sat five more hours than Rachel, and together they have baby-sat at least 37 hours. What is the least number of hours each has baby-sat?
27
13. The sum of three consecutive even integers is less than 84. What are the greatest possible values of these integers?
07, 89
14. Find the greatest possible pair of integers such that one integer is twice the other and their sum is less than 30.
36, 37
15. Your test grades are 85, 74, and 91. What is the lowest grade you can get on the next test and have an average of at least 80?
97
16. Thornton needs at least 500 milligrams of vitamin C each day. He gets his vitamin C by munching brussel sprouts. Each sprout furnishes 10 milligrams of vitamin C. Find the number of sprouts he must eat each day.
250
17. Mike receives a base pay of \$700 each week for 40 hours of work. He then receives \$14 per hour for any additional time he works over the 40 hours. How many additional hours would Mike need to work to receive a weekly paycheck of at least \$882?
 $x \geq 40/14$
18. For a wedding reception a banquet hall charges \$3000 to rent their facility and then \$37 per person. What is the maximum number of people that Miss A can schedule for if the cost must not exceed \$10,400?
587
19. Weight Watchers wants your average daily calories to not exceed 1000 calories. How many calories can Sue consume on Friday if she has logged the following calories during the rest of the week?
Monday 900 calories, Tuesday 1400 calories, Wednesday 1200 calories, Thursday 800 calories
 $x = 3000$
20. A basketball team has scored 48, 59, and 54 points in its first three games. What must they score in their fourth game if they want an average of at least 56 points?
58