

SOLVING INEQUALITIES WITH VARIABLES ON BOTH SIDES



1. If $t + 8 = 2$, find the value of $2t$.

- A. -12 B. -6 C. 12 D. 20

2. Solve $2(3z + 1) = -2(z + 3)$

EXAMPLES: Solve each inequality and graph the solution.

1. $-4m - 3 < 2m + 6$



2. $2(k - 3) \leq 6 + 3k - 3$



EXAMPLE: Write an inequality and solve.

3. The *Houston Chronicle* charges a fee of \$650 plus \$80 per week to run an ad. The *Bryan-College Station Eagle* charges \$145 per week. For how many weeks will the total cost at The *Houston Chronicle* be less than the cost at The *Bryan-College Station Eagle*?

4. Your quiz grades are 78, 72, 87, and 90. What score on the fifth quiz will make your average quiz grade at least 82?

5. When you rent a car from Car-Rent-A-Center, there are 2 payment options. You can pay \$25 a day plus 15¢ a mile (option A) or you can pay \$10 a day plus 40¢ a mile (option B). For what amount of daily miles will option A be the cheaper plan?