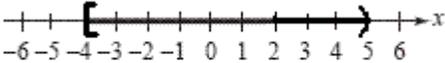


Practice Problems for MTE 4 – First Degree Equations and Inequalities in One Variable

- Solve the equation $x - 2 = 9$.
- Solve the equation $5x = 40$.
- Solve the equation $5x + 7 = 42$ for x .
- Solve the equation $\frac{x}{2.26} + 8.31 = -8.43$ for x . Round your answer to two decimal places.
- Solve the equation $-3(y + 6) = 9$ for y .
- Solve the equation $5 + 7t = 23 + t$ for t .
- Solve the equation $3(x + 2) = -9(x - 7)$ for x .
- Solve the equation $-7(y + 4) = -5y - 2y - 3$ and identify the solution as finite, the empty set, or all real numbers.
- Solve the equation $S = A - D$ for A .
- Solve the equation $D = rt$ for t .
- Solve the equation $P = 2l + 2w$ for w .
- Solve $|15 - 5t| = 55$, if possible.
- Solve $2.5x + 5 \leq 16.4$. State the solution using inequality notation.
- Solve the inequality $5(x + 2) \geq 3(x + 9)$. State the solution using inequality notation.
- Solve the inequality $-\frac{3}{8}t \leq 5$. State the solution using interval notation.
- Write the solution using interval notation.

- Solve the inequality $x + 3 \leq -2$.
- A company pays its sales representatives 35 cents per mile if they use their personal cars. A sales representative submitted a bill to be reimbursed for \$148.05 for driving. How many miles did the sales representative drive?
- If an object traveled 230 miles at a rate of 25 miles per hour, how long (in hours) did it take to travel this distance?
- A hardware store is having a 20%-off sale. If an item has a list price of \$14.40, what is the item's sale price?
- Tickets for a college baseball game are \$9 for lower level seats and \$5 for upper level seats. For a particular game, 850 lower level seats were sold. The total revenue from the ticket sales was \$9650. How many upper level seats were sold?
- The bill for repairing a car was \$345. The cost for parts was \$160. The cost for labor was \$37 per hour. How many hours did the repair work take?