

Xavier University of Louisiana
Study Guide for the Xavier Mathematics Placement Test

6. Solving linear equations and inequalities

Multiple Choice Practice Problems

- 1 Solve the equation $9 - 9x = 81$ for x :
- a. $x = -10$
 - b. $x = -72$
 - c. $x = -8$
 - d. $x = 72$
 - e. $x = 8$
- 2 Solve the equation $\frac{x}{5} - \frac{1}{7} = \frac{1}{35}$ for x :
- a. $x = \frac{2}{7}$
 - b. $x = \frac{6}{7}$
 - c. $x = \frac{4}{7}$
 - d. $x = 6$
 - e. $x = 4$
- 3 Solve the equation $b + ax = bx - 5a$ for x :
- a. $x = \frac{-5a - b}{a + b}$
 - b. $x = \frac{b - 5a}{a - b}$
 - c. $x = \frac{-5a - b}{a - b}$
 - d. $x = \frac{-5a}{b}$
 - e. $x = -5$
- 4 Solve for x : $\frac{x - 5}{x - 1} = \frac{x - 3}{x}$
- a. $x = -\frac{3}{7}$
 - b. No solution