

Xavier University of Louisiana

Study Guide for the Xavier Mathematics Placement Test

6. Solving linear equations and inequalities

Practice Problems

Solve for x :

1. $30 - 6x = -60$ $x = 15$

2. $\frac{x}{7} - \frac{1}{3} = \frac{1}{21}$ $x = \frac{8}{3}$

3. $b + ax = 4a + bx$ $\frac{4a - b}{a - b}$

4. $\frac{x - 1}{x - 4} = \frac{x + 1}{x}$ $x = -2$

5. $2x - 14 = -20$ $x = -3$

6. $\frac{x}{6} - \frac{1}{7} = \frac{1}{42}$ $x = 1$

7. $b + ax = 2a + bx$ $\frac{2a - b}{a - b}$

8. $\frac{x + 4}{x + 2} = \frac{x - 1}{x}$ $x = -\frac{2}{3}$