$\begin{array}{c} \text{ALGEBRA 2} \\ \text{PROBLEM SET } \#1 \end{array}$

DUE DATE: AUGUST 21, 2023

Question 1. Compute the following:

- (a) $5((2+7) \div 3)$
- $(b) \qquad \frac{8+2\times3}{12}$

Question 2. Simplify the expression

$$10 - 2 \cdot 7 + (11 - 5)^2 \div 3 + 2(10 - 3)^{4^2 - 45 \div 3}.$$

Question 3. Simplify and compute the expression

$$10 - (\frac{6}{3} - 4 \times 2) - 8 \times 3 + 1.$$

Question 4. Solve for x in the equation 2x - 5 = -3(x - 5).

Question 5. Solve for x in the equation $\frac{x}{3} + \frac{x}{6} = 1$. Hint: Create common denominator before combining!

Question 6. Solve for x in the equation

$$2x + 3 - 4 = 3x - 5 - x$$