MAT 0024 **SOLVING EQUATIONS INVOLVING FRACTIONS**
Worksheet 3
Sections 2.1 & 2.2

Summary: To solve equations, use the addition/multiplication principles to **"Get rid of…"**

1. **P**arentheses by using the distributive property. If no fractions, combine like terms.
2. **D**enominators: Multiply each side of equation by common denominator.
   Decimals: Multiply each side of equation by 10, 100, 1000, etc. **COMBINE LIKE TERMS.**

BEFORE NEXT STEP EACH SIDE SHOULD BE NO MORE COMPLICATED THAN: "4x – 8"

3. **S**igns (addition or subtraction) by using the addition principle (**add opposites**). Get variable terms on one side of the equation and all constant terms on the other side. Goal: Each side of equation is **no more complicated** than "4x = -9."
4. **C**oefficients by dividing **by coefficient (BY SAME NUMBER)**. Goal: x = number

Parents, **D**o **S**end **C**ash

1. $\frac{m}{4} = -3$
2. $\frac{1}{4}x = 5$
3. $\frac{t}{-3} = 6$
4. $-6 = \frac{3x}{5}$
5. $\frac{-2}{7}x = 6$
6. $-5 = \frac{-x}{6}$
7. $\frac{-m}{8} = -5$
8. $\frac{-m}{3} = 2$
9. $\frac{3}{4}t = \frac{2}{3}$
10. $\frac{2}{3} = -\frac{3}{5}t$
11. $\frac{-5}{6}x = \frac{3}{4}$
12. $\frac{3}{4}x = \frac{1}{2}$
13. $2y - \frac{3}{5} = \frac{1}{2}$
14. $y - \frac{2}{5} = -\frac{1}{3}$
15. $\frac{1}{4} + \frac{1}{2}t = 4$