## Graphing v. Factoring

## Graphing:

The equation needs to be in the form:

$$y=ax^2+bx+c$$

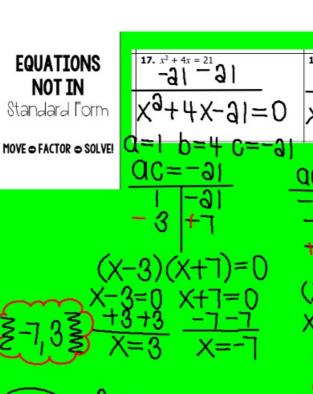
Graph the equation and identify the <u>roots</u>, aka the <u>x-intercepts</u>, or the <u>zeroes</u>.

## Factoring:

The equation needs to be in the form:

$$ax^2 + bx + c = 0$$

Factor completely and then set each factor equal to o. Solve each equation for x.



21. 
$$11x^{2} = x^{2} + 8x$$
  
 $-X^{2} - X^{2}$   
 $10X^{2} = 8X$   
 $-8X - 8X$   
 $10X^{2} - 8X = 0$   
 $3X - 3X$   
 $3X(5X - 4) = 0$   
 $44 + 44$   
 $3X = 0$   
 $3X = 4$   
 $3X = 0$   
 $3X = 0$