Name:\_\_\_\_\_\_Group:\_\_\_\_\_

## WHY DIDN'T THE PIANO WORK?

Solve each equation. Once you have the correct answer, bring it up in exchange for a letter.

**1.** 
$$(x+3)\left(x-\frac{2}{5}\right)=0$$
 **2.**  $\left(m-\frac{2}{5}\right)\left(m+\frac{3}{2}\right)=0$  **3.**  $(4b+16)(b-6)=0$ 

**4.** (7a-14)(a+8) = 0 **5.** (2y+3)(y-9) = 0 **6.** (5z-8)(3z+2) = 0

7. 
$$(9w-2)(7w-3) = 0$$
  
8.  $(8-2c)(5c+1) = 0$   
9.  $(9-8r)(10-4r) = 0$ 

Factor the expression by finding the greatest common factor. Once you have the correct answer, bring it up in exchange for a letter.

**10.** 
$$9x^2 - 21y$$
 **11.**  $4m^3 + 24m$  **12.**  $10p^2q - 5pq^2$ 

**13.** 
$$6x^3y + 9y^2$$
 **14.**  $35a^2b^2 - 5ab$  **15.**  $12m^2n - 8mn^2$ 

**16.** 
$$w^4 - 2w^3 + w$$
 **17.**  $-3p^4 + 15p^2 + 6p$  **18.**  $8r^5 - 20r^4 - 12r^2$ 

Solve each equation. Once you have the correct answer, bring it up in exchange for a letter.

**19.** 
$$12a^2 - 9a = 0$$
 **20.**  $18x^2 + 12x = 0$  **21.**  $6z^2 - 8z = 0$ 

**22.** 
$$-28m^2 = 14m$$
 **23.**  $20p^2 = -24p$  **24.**  $100m^2 = -6m$ 

**25.**  $-30r^2 = -25r$ 

Now that you have all 25 letters, unscramble them to answer the riddle at the top of the page!