

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

**Unit 1 Extra Practice**

1. A total of 574 people attended a dinner gathering at a soup kitchen one weekend. There were 28 more people on Saturday than Friday. On Sunday, the number of people who attended the gathering was 92 more than half of the number of people who attended on Saturday. How many people visited the soup kitchen each day?

2. In a school, students were asked to volunteer by spending some time with those in children's hospitals, senior citizens centers, animal shelters, and homeless shelters. Each student was asked to record how much time he/she spent volunteering in total. The number of hours recorded by juniors was 30 hours more than the number of hours recorded by freshman. The seniors recorded 30 hours more of volunteer work than the juniors. The sophomores spent the most time volunteering! The number of hours they volunteered was specifically 60 less than double the amount of hours volunteered by the freshman. In total, 1130 hours of volunteer work were recorded. How many hours did each class spend volunteering?

3. Solve each equation. Remember to check for and identify any extraneous solutions.

a.  $8 + 3s = 13 - |4s - 2|$

b.  $5 - |6w + 2| = -5 + 2w.$

4. Solve and graph your solution to each inequality. You may estimate fractions where necessary, but be sure to scale your number lines appropriately.

a.  $3 - 8(z + 4) \leq 24z + 3 < 135$

b.  $-18 < 9 + 2p \leq 4 - 3(p + 1)$

Solutions:

1. Friday: 176 people   Saturday: 204 people   Sunday: 194 people

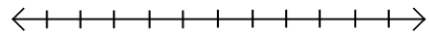
2. Freshman: 220 hours                  Sophomores: 380 hours

Juniors: 250 hours                          Seniors: 280 hours

3. a.  $s = -3$  and  $s = 1$

b.  $w = 1$ ;  $w = -3$  is extraneous

4. a.  $-1 \leq z < 5.5$



b.  $-13.5 < p \leq 1.6$

