

#4 1. $(-35) - 12 =$ -47 #4

2. $-13 - (-56) =$ 43

3. Find the mean absolute deviation for the following data set.
 3 1 0 1 2 2 2 2 2 2
 8 8 8 8 8 8 8 8 8 8
 5, 7, 8, 9, 9, 10

Median 8 Mode 9
 mean $\frac{48}{6} = 8$
 mean of Diff. $\frac{8}{6} = 1.3$

4. $\frac{75}{-5} = \frac{-5x}{-5}$ -15

5. $184 + v = -12$ -196

6. $-7n - 3 = -59$ 8

*7. $-6x + 13 \geq 25$ $x \leq -2$

8. $-2(-25 + 14v) =$ 50 - 28v

9. $(-9) + 3x + 4 - 2x =$ -5 + x or x - 5

10 A biologist originally marked 40 butterflies in Wilson Park. Over a month long period butterfly traps caught 200 butterflies. Of those 200, 18 were found to have tags. Based on this information, what is the estimated population size of the butterflies in Wilson Park? **SHOW WORK** to get credit.

1000 butterflies

tag $\frac{40}{x} = \frac{18}{200}$

$\frac{8x}{8} = \frac{8000}{8}$
 $x = 1000$

11. $40 = -4(3n + 5)$
 -5
 $40 = -12n - 20$
 $+20$
 $60 = -12n$
 -12
 $-5 = n$

$\frac{40}{x} = \frac{18}{200}$
 $\frac{40 \times 2}{x \times 5} = \frac{200}{2}$
 $\frac{80}{x} = \frac{200}{2}$
 $x = 1000$