Math 8 – Unit 5 Review Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Solve each equation showing all work. Check your answers!

1. -43 – 4r = 3(1 – 9r)
2. -2(-9m – 2) – 1 = 27 + 10m
3. 2 + 8n = 6n + 3(2 + n)
4. 4(x – 3) = 4x – 7
5. 5x + 4 = 2(x + 2) + 3x
6. 3(x + 1) = 2x – (-3) + x
7. 2m – 1 = 1 – 2m
8. 3a + 17 = 32
9. 4(y – 2) – 6y = -2(3y + 2)
10. 3(2.3x – 3)= - 2.1
11. Solve for y: 3x – y = 5
12. Solve for y: 3y + 12x = 6
13. Solve for y: 2x + 3y = 3

Define each variable, Write an equation, and Solve, SHOWING ALL WORK.

1. Tickets for the high school musical are $5.50 for adults and $3.75 for students. How many adults bought tickets if 525 student tickets are sold and the total money collected is $3772.75?
2. A public beach in Florida charges nonresidents $8 per day for a fishing license and $2.50 per day for live bait. Florida residents pay an annual fee of $114 plus $1 per day for live bait. How many days must both a resident and a nonresident use the beach in one year so that both pay the same amount?
3. Hooploo charges nonmembers $4 to stream each movie online. A Hooploo membership costs $21 and members pay only $2.50 to stream each movie. For what number of movies is the cost the same?
4. Wildcat Wireless charges $4.95 per month for unlimited texts plus an additional $0.20 per gigabyte of data used. If the total cost for their monthly bill is $22.95, how many gigs of data did they use for the month?