Work with your table partner on the below word problems. Write and solve an equation for each situation and define your variables.

1.) The cost of renting a jet ski is $40 per day plus $50 per hour for use. How many hours was a jet ski rented if the total cost was $390?

2.) When an alligator is born it is about 8 inches long. Each year they grow about 12 inches. Determine how old an alligator is that is 116 inches long.

3.) Membership at the Healthy You Gym is a $40 initial fee and $5 a visit. If Sanjaya’s bill was $105, how many times had he visited the gym?

4.) Membership to a video game club is $50 a year and $3 per game rented. At the end of the year Harvey had spent $296. How many games had he rented?

5.) Danielle wants to paint a ceramic planter. The total price is the cost of the planter plus an hourly rate of $6. Determine how many hours Danielle painted if she spent $9 on the planter and her total bill was $33.

6.) Jackson Intermediate School is doing a fund raiser selling magazine subscriptions. The magazine publisher will pay the school a starting bonus of $500 and then $4 for each magazine subscription sold. At the end of the fund raiser the school paid a total of $1360. How many subscriptions did they sell?

7.) The lengths of the sides of a triangle are x, 2x + 1, 5x + 4 inches. If the perimeter is 53 inches, what is the value of x?

Solve the following equations.

1.) $\frac{1}{4}\left(6x+24\right)-2x+10-4=43$ 2.) $-\frac{1}{2}\left(6x-4\right)+5\left(x+2\right)=0$

3.) $2\left[4-\left(x-1\right)+3x\right]=14$ 4.) $2+3\left[2\left(x+4\right)-7\right]=35$

5.) $4\left[5x+7-8x\right]+2=-18$