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## 3.1-3.4 Word Problems

1. Lifetime Fitness charges you $\$ 30$ membership fee, and $\$ 2$ for each visit to the gym. Xtreme Sports Fitness charges you a $\$ 15$ membership fee and $\$ 3$ for each visit to the gym. After how many visits will you have paid the same amount no matter which gym you belong to?
$X=$ $\qquad$
2. The sum of three numbers is 32 . Let x be the first number. The second number is 4 more than the first number and the third number is two times the second number. What are the three numbers?

First \#: $\qquad$
Second \#: $\qquad$
Third \#: $\qquad$
3. You are buying a new car. You made a down payment of $\$ 5000$, and you will make equal payments every month. After 4 years you have paid a total of $\$ 21,800$ for the car. What are your monthly payments?
$X=$ $\qquad$
4. Currently, you have $\$ 80$ and your sister has $\$ 145$. You decide to save $\$ 6$ of your allowance each week, while your sister decides to spend $\$ 7$ each week. How long will it be before you have as much as money as your sister?
$X=$ $\qquad$
5. The length of a rectangle is 4 units less than 3 times the width. The perimeter is 22 units more than twice the width. Find the length and width.

6. You helped a friend move a short distance recently. The friend rented a truck for $\$ 15$ an hour and rented a cart for $\$ 5$. Your friend paid a total of $\$ 80$ for the rental. For how long did your friend rent the truck?
$X=$ $\qquad$
7. For $\$ 360$, a rock-climbing gym offers a yearly membership where members can climb as many days as they want and pay $\$ 4$ per day for equipment rental. Non-members pay $\$ 10$ per day to use the gym and $\$ 6$ per day for equipment rental. Write and solve an equation to find the number of visits after which the total cost is the same for a member and nonmember.

X = $\qquad$
8. The length of a rectangle is 12 units more than the width. The perimeter is 7 times the width. Find the length and width.

