## Day 2 - Creating and Solving Equations Practice

Write an equation that models the situation. You do NOT have to solve!

1. Five times the sum of $e$ and 3 is equal to -5 .
2. Jamie buys 9 CDs at same price per CD and a cassette tape for $\$ 9.45$. His total bill was $\$ 118.89$.

Define a variable for each problem below. Then write an equation that can be used to model the following problem. Finally, use your equation to SOLVE the problem.
3. At a concert, Nabila purchased three $t$-shirts and a concert program that cost $\$ 15$. In total, Nabila spent $\$ 90$. Find the cost of a single t-shirt if they all had the same price.

Variables: $\qquad$
Model: $\qquad$
4. Oberon Cell Phone Company advertises service for 3 cents per minute plus a monthly fee of $\$ 29.95$. If Parker's phone bill for October was $\$ 38.95$, find the number of minutes he used.

Variables: $\qquad$
Model: $\qquad$
5. Jacqueline had $\$ 20$ to spend on 7 raffle tickets. After purchasing them she had $\$ 6$ left. How much did each raffle ticket cost?

Variables: $\qquad$
Model: $\qquad$

Variables: $\qquad$
Model: $\qquad$
7. Savannah bought a laptop for $\$ 500$. It was marked $\$ 50$ off because it was out of the box and slightly scratched. She also got a $25 \%$ student discount, which was taken off the original price. What was the original price of the laptop?

Variables: $\qquad$
Model: $\qquad$
8. The zoo offers special admission rates for large groups of visitors. The zoo charges $\$ 7.50$ admission for the first visitor and $\$ 5.50$ for each additional visitor in the group. Write an equation for the total cost of admission in terms of the number of visitors. How much is admission for a group of 8 visitors?

Variables: $\qquad$
Model: $\qquad$
9. The jewelry store has a special on shirts. If you purchase 2 shirts for $\$ 65$, each additional shirt is $\$ 24.99$. Write an equation that represents that total cost of shirts based on the number of shirts purchased. What is the total cost of purchasing 4 shirts?

Variables: $\qquad$
Model: $\qquad$
10. The width of a rectangle is 5 feet less than the length. The perimeter is 62 . Find the length and width of the rectangle.

Variables: $\qquad$
Model: $\qquad$

