Name $\qquad$ Per $\qquad$
Mrs. Doolan/Math6

## Solve for a Sales Price or Adding a Tip by Using Percent of a Number

Have you ever wondered how a sales price is calculated? Or how a tip is added to a restaurant bill? To determine both you first solve for percent of a number. To calculate a sales price you solve for percent of a number and then you subtract that number off.

Example \#1: You want to buy an iPod. The full price is $\mathbf{\$ 1 8 0}$, but it is on sale for $\mathbf{2 0 \%}$ off. How much will the iPod cost on sale?

Step \#1: Multiply \$180 x $\qquad$ .

Step \#2:
Subtract \$180 - $\qquad$ .


Step \#3: Solve: Sales price: \$ $\qquad$ .

Example \#2: You want to buy a game for Xbox 360. The full price is $\mathbf{\$ 6 0}$, but it is on sale for $35 \%$ off. How much will the game cost on sale?

Step \#1: Multiply \$60 x $\qquad$ .

Step \#2: Subtract \$60 - $\qquad$ .

Step \#3: Solve: Sales price: \$ $\qquad$ .

We also use solving for percentage to tip at a restaurant. To calculate a tip you first solve for percent of the bill and then you add that number on to the amount of the bill.

Example \#3: Your family decides to celebrate your excellent report card by dining at Noon Hill Grill one evening. The bill arrives and your parents want to add a $20 \%$ tip to it. If the bill was $\$ 82.40$, how much would they pay, including the tip?


Step \#1: Multiply $\$ 82.40$ x $\qquad$ .

Step \#2: Add \$82.40 +
Step \#3: Solve: Total restaurant price (bill and tip): \$ $\qquad$ .

Example \#3: The women's Olympic hockey team went out to dinner when they arrived back in the United States. Their bill was $\$ 362.18$. Their coach added a $25 \%$ tip. How much was the total of their restaurant bill and tip? Remember, round all tips to the hundredths place if needed.

Step \#1: Multiply $\$ 362.18$ x $\qquad$ .

Step \#2: Add \$362.18 + $\qquad$ .

Step \#3: Solve: Total restaurant price (bill and tip): \$ $\qquad$ .

