Answer \# S1

Answer \# S2

Answer \# 1

## Question \#1

If the operation " $\&$ " is defined as $h \& k=h^{2}+k$, find the missing part if 10 \& $\qquad$ $=15$ ?

## Question \#2

Answer \# 2

## Sample Question 1

What is the sum of the integer factors of 124 ?

## Sample Question 2

My magic number is positive, and when it is multiplied by 7 and the answer is less than 100. What is the sum of all the possible values of my magic number?

A purchase of $\$ 15.00$ costs $\$ 16.80$ after tax is added. What percent tax was charged for the purchase?

## Question \#3

The line $2 x+3 y=-12$ passes through the point $(3, a)$. What is the value of $a^{2}+6 a+9$ ?

## Question \#4

What is the least common multiple of 18,21 , and 30 ?

Answer \# 5

## Question \#5

Evaluate: $-2+6 \div\left(3-2^{2}\right) \cdot 27 \div 9$.

## Question \#6

My mother gave me some money to spend. I spent $\$ 35$ at the mall on a shirt. I spent $\frac{1}{3}$ of what I had left on a new pair of shoes. Then I put $\frac{3}{4}$ of what I had left in the bank. If I still have $\$ 25$, how many dollars did my mother give me in the beginning?

Answer \# 7
Question \#7
Sarah has 2 bins where she collects numbers. In bin A, she has every positive number less than 142 that is a multiple of 5 . In bin $B$, she has every positive number less than 150 that is a multiple of 3 . How many numbers in bin A are NOT in bin B?

## Question \#8

Answer \# 8
If $12(x+5)-4(x-7)=5(x-3)+40$, then what is the value of $9 x$ ?

Answer \# 9

## Question \#9

What is the area of the triangle shown?


## Question \#10

Answer \# 10
What is the fraction, in simplest form, whose decimal equivalent is $0.1 \overline{36}$ ?

## Question \#11

A fair coin is flipped 3 times. What is the probability that exactly 2 of the flips are "heads up"?

## Question \#12

Answer \# 12
If $\sqrt{30625}$ is an integer, what is that integer?

