# CLUE \#1 

## CSI: $6019010112 ?$

You are ordering concert tickets. You pay a processing fee of $\$ 5$, plus $\$ 18$ per ticket. How many tickets can you buy for $\$ 100$ ?

3 The murder was not done by chemical poisoning.
4 Mr. Epsilon was reading in the library.
5 The victim was not mauled by a cougar.
6
Coach Omega was exercising in the gym.

## CSI: 10001913 ?

$\left.\left(\begin{array}{l}1 \\ \rho\end{array}\right] \rightarrow \begin{array}{ll}1 & 4 \\ 1 & 4\end{array}\right)$

Which equation is equivalent to $2(x+1)+1=y$ ?
$x+7=y+4 \quad$ The murder was not a drowning.
$2 x-3=y-3 \quad$ The victim was not electrocuted.
$4 x+3=2 y \quad$ Professor Delta was watching a movie in the theater.
$3 x+3=y+x \quad$ Dr. Alpha was cooking in the kitchen.

## CLUE \#3

## CSI: AODOAIOT?

You are renting a canoe. It costs $\$ 35$ to rent the canoe, plus $\$ 6$ per hour. You have $\$ 60$. How long can you rent the canoe? Round to the nearest hour.

1h Mrs. Gamma was laying by the pool.
3h Miss. Beta was lounging around the atrium.
4h The victim did not have a venomous bite.
$5 \mathrm{~h} \quad$ The murder was not an assault with a firearm.

## CSI: $160101912 ?$

## CLUE \#4

The area $A$ of a rhombus is given by the formula $A=\frac{1}{2} d_{1} d_{2}$, where $d_{1}$ and $d_{2}$ are the lengths of the diagonals. Which equation could you use to find the value of $d_{1}$ for the different values of $d_{2}$ and $A$ ?

$d_{1}=A\left(\frac{d_{2}}{2}\right)$
Mr. Epsilon was eating a snack in the kitchen.
$d_{1}=\frac{A}{2 d_{2}} \quad$ The victim did not have a venomous bite.
$d_{1}=\frac{2 A}{d_{2}} \quad$ Miss. Beta was watching a movie in the theater.
$d_{1}=A-d_{2}-\frac{1}{2} \quad$ The victim was not mauled by a cougar.

## CLUE $\# 5$

## CSI: WODOEDID?

Your friend's age is 5 years less than half her mother's age. Your friend is 15 years old. How old is her mother?

## 35

Mr. Epsilon was reading by the pool.
40 The victim was not electrocuted.
45 Miss. Beta was using a computer in the library.
50 The victim was not mauled by a cougar.

## CSI: 1 ODOW T1:

## CLUE \#6

In biology, the surface-area-to-volume quotient $Q$ of a single spherical cell is given by the formula $Q=\frac{3}{r}$, where $r$ is the radius of the cell. A biologist needs to calculate the diameter $d$ of a cell in terms of $Q$. Because $d=2 r$, which formula could the biologist use to find $d$ ?
$d=\frac{6}{r} \quad$ The murder was not an assault with a firearm.
$d=2\left(\frac{3}{Q}\right) \quad$ Coach Omega was taking a nap in the atrium.
$d=2 Q \quad$ The murder was not a drowning.
$d=\frac{3}{2 r} \quad$ Dr. Alpha was swimming in the pool.

## CLUE \#7

## CSI: WODOANT?

A ski resort offers a super-saver pass for $\$ 90$ that allows you to buy lift tickets at half price. If you buy the pass, the cost (in dollars) of buying $t$ tickets is $90+22.5 t$. Otherwise, the cost (in dollars) is $45 t$. How many lift tickets would a skier have to buy for the two costs to be equal?

2 The victim did not have a venomous bite.
4 The murder was not an assault with a firearm.
6 Coach Omega was browsing books in the library.
$8 \quad$ Professor Delta was playing basketball in the gym.

## CSI: WODONTIT?

## CLUE \#8

A music store offers a finance plan where you can make a $\$ 50$ down payment on a guitar and pay the remaining balance in 6 equal monthly payments. You have $\$ 50$ an dcan afford to pay between $\$ 60$ and $\$ 90$ a month. What is a reasonable price that you can afford to pay for a guitar?
\$542
\$591 Miss. Beta was reading in the library.
\$645 The murder was not a drowning.
\$718 The victim did not have a venomous bite.

## CLUE \#9 CSI: $5 \mathbf{5 0 0 0 0 0 1 0}$ ?

What is the solution of $7 v-(6-2 v)=12$ ?

$$
\begin{array}{ll}
v=-3.6 & \text { Dr. Alpha was watching a movie in the theater. } \\
v=-2 & \text { The murder was not done by chemical poisoning. } \\
v=3.6 & \text { Mr. Epsilon was reading in the library. } \\
v=2 & \text { The murder was not a drowning. }
\end{array}
$$

## CSI: 9001013 ?

## CLUE \#10

An investor puts $x$ dollars in Fund A and $\$ 2000$ in Fund B. The total amount invested in the two funds is $4 x-1000$ dollars. How much money did the investor put in Fund $A$ ?
\$333 The murder was not done by chemical poisoning.
$\$ 1000 \quad$ Mr. Epsilon was doing laps in the pool.
\$3000 The victim was not electrocuted.
\$333 Professor Delta was browsing books in the library.

