

1.

High level language : $a1 = (a1 - a2) * a4 + a5$

Assembly language:

SUB a1, a2, a3 ($a1 = a2 - a3$) (*3-address instruction*)

MUL a1, a4 ($a1 = a1 * a4$) (*2-address instruction*)

ADD a1, a5 ($a1 = a1 + a5$) (*2-address instruction*)

2.

Equation is the following $EPS = \frac{\text{number of security event}}{\text{time period (s)}}$

$8 + 8 + 10 + 5 + 8 + 8 = 47\text{msec}$

$$\frac{47\text{msec} * 10^{-3}}{1 \text{ msec}} = 0.047\text{sec}$$

$47 * 10^{-3}$ seconds