(a)

```
recursiveLinearSearch(a, item, pos)
    if a[pos] != term
        return recursiveLinearSearch(a, item, pos + 1)
    return pos
```

(b)

$$
\begin{aligned}
\text{Base Case: } T(1) &= 1 \\
T(n) &= T(n-1) + 1 \\
T(2) &= 1 + 1 \\
T(3) &= T(2) + 1 \\
&= 1 + 1 + 1 \\
T(n) &= n
\end{aligned}
$$

(c)

Best Case Runtime $\Theta(1)$

(d)

Worst Case Runtime is $\Theta(n)$ see (b)