# Class ItemControl

## Function calcLore

This function must calculate the player’s ability to identify a magical item.

The inputs are:

The character’s Lore skill

The character’s Intelligence ability

A random number 1-20

The output to return is an integer that the calcLore function will then use to see if an item is identified.

We will validate the skill and ability values when the player creates the character, so all inputs will be valid.

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **calcLore Test Matrix**  **Test Cases** | | | | | | |
| **Valid Input** | **Boundaries** | | | | | |
| **Inputs** | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Lore | 6 | 4 | 24 | 10 | 10 | 10 | 10 |
| Intelligence | 12 | 10 | 10 | 8 | 22 | 10 | 10 |
| Random 1-20 | 6 | 10 | 10 | 10 | 10 | 1 | 20 |
| **Outputs** |  | | | | | | |
| identifyScore | 13 | 14 | 34 | 19 | 26 | 11 | 30 |
| Test Case |  | Low Lore | High Lore | Low Int | High Int | Low Rnd | High Rnd |

d20 = rnd() \* 20 + 1

identifyScore = Character.skills[3] + ((Character.abilities[4] – 10) / 2) + d20

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **calcLore**  **(variables in memory for each case)** | | | | | | |
| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Character.skills[3] | 6 | 4 | 24 | 10 | 10 | 10 | 10 |
| Character.abilities[4] | 12 | 10 | 10 | 8 | 22 | 10 | 10 |
| d20 | 6 | 10 | 10 | 10 | 10 | 1 | 20 |
| identifyScore | 13 | 14 | 34 | 19 | 26 | 11 | 30 |