

Review Sheet – If Statements

What Are If Statements

A block of code that runs when a certain condition is true. The format is:

```
if (this condition is true)
{
    Do the code here
}
```

Example:

```
if (playerHealth < 0)
{
    Console.WriteLine("You died. Game over.");
}
```

Relational Operators

The different types of operators you can use to evaluate your **if statements**.

Operator	Name	Description
==	Equal	Checks if two values are the same
!=	Not Equal	Checks to see if two value are not the same
>	Greater Than	Checks to see if the value on the left is greater than the value on the right
<	Less Than	Checks to see if the value on the left is less than the value on the right
>=	Greater Than or Equal	Checks to see if the value on the left is greater then or equal to the value on the right
<=	Less Than or Equal	Checks to see if the value on the left is less than or equal to the value on the right

Else Statements

Else statements are blocks of code when the **if statement** condition is not true. The format is:

```
if (this condition is true)
{
    Do the code here
}
else
{
    Do the code here
}
```

Else If Statements

You can only have one **else statement**, but you can have multiple **else if statements**. An **else statement** will always run if the **if statement** is **not** true.

When you have **if statements** followed by **else if statements**, the first **if** or **else if statement** condition that is true will run, but the rest will be skipped over until the next time the program goes through the code. The format is:

```
if (this condition is true)
{
    Do the code here
}
else if (this condition is true)
{
    Do the code here
}
else if (this condition is true)
{
    Do the code here
}
```

Nesting If Statements

You can put if statements inside each other. If you do that, the **if statement** that is inside another will run last. The format is:

```
if (this condition is true)
{
    Do the code here, then check the next if statement

    if (this condition is true)
    {
        Do the code here
    }
}
```

However, if you're nesting lots of if statements inside each other, there's probably a better way to structure the code.