Function – Every input has exactly one output. (Each x-value only has only y-value.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 4 | 5 |
| y | 2 | 7 | 3 | 8 | 9 |

**Function because the x-values do not repeat**.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 4 | 6 | 1 | 8 |
| y | 2 | 4 | 9 | 5 | 1 |

**Not a function because 1 has outputs of 2 and 5.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 3 | 6 |
| y | 4 | 5 | 6 | 6 | 7 |

**Function because 3 has the same exact output.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 4 | 5 |
| y | 1 | 1 | 1 | 1 | 1 |

**Function because the x-values do not repeat.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 2 | 2 | 2 | 2 | 2 |
| y | 4 | 4 | 4 | 4 | 4 |

**Function because all of the inputs have the exact same output.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 1 | 2 |
| y | 4 | 5 | 4 | 6 | 5 |

**Not a function because 1 has inputs of 4 and 6.**



**Function because the x-values do not repeat.**



**Not a function because 3 has outputs of 54 and 84.**

{(1, 3), (2, 7), (1, -2)}

**Not a function because 1 has outputs of 3 and -2.**

{(1, 1), (2, 1), (3, 1)}

**Function because the x-values do not repeat.**

{(3, 2), (5, 3), (5, 5)}

**Not a function because 5 has outputs of 3 and 5.**

{(1. 4), (3, 8), (5, 16)}

**Function because the x-values do not repeat.**

{(1, 1), (2, 2), (3, 3)}

**Function because the x-values do not repeat.**

{(1, 1), (1, 2), (1, 3)}

**Not a function because 1 has outputs of 1, 2 and 3.**



**Function because it passes the vertical line test.**



**Not a function because it does not pass the vertical line test.**



**Not a function because it does not pass the vertical line test.**



**Function because it passes the vertical line test.**



**Not a function because it does not pass the vertical line test.**



**Function because it passes the vertical line test.**



**Not a function because it does not pass the vertical line test.**



**Function because it passes the vertical line test.**



**Not a function because it does not pass the vertical line test.**



**Function because every input has one output.**



**Not a function because 1 has outputs of 4 and 6.**



**Function because every input has one output.**



**Function because every input has one output.**



**Not a function because a has outputs of p and r and b has outputs of p and r.**



**Not a function because -2 has outputs of 1 and 3.**



**Function because every input has one output.**



**Not a function because -35 has outputs of 1 and 22.**