

True or False?

**Linear Inequalities**

For each statement, circle the correct response.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1** | The inequality $x<3$ is represented on the number line as : |  | True | False |
|  |  |  |  |
| **2** | The inequality $1<x\leq 3$ is represented on the number line as : |  | True | False |
|  |  |  |  |
| **3** | The integers $2, 3$ and $4$ all satisfy the inequality $x<4$ | True | False |
|  |  |  |  |
| **4** | The integers $-1, 0$ and $1$ are the only integers to satisfy the inequality $-1\leq x<2$ | True | False |
|  |  |  |  |
| **5** | The only integer to satisfy both inequalities $-1\leq x<4$ and $2<x\leq 6$ is $3$. | True | False |
|  |  |  |  |
| **6** | The solution to the inequality $x-3>5$ is $x>2$ | True | False |
|  |  |  |  |
| **7** | The solution to the inequality $-4x\leq 20$ is $x\geq -5$ | True | False |
|  |  |  |  |
| **8** | The solution to the inequality $20>3x-1$ is $x<7$ | True | False |
|  |  |  |  |
| **9** | The integers $-3, -2 $and $-1$ all satisfy the inequality$$-2\leq x+1<0$$ | True | False |
|  |  |  |  |
| **10** | The solution to the inequality $-8\leq 8x<56$is $-1\geq x>7$ | True | False |
|  |
| **11** | The solution to the inequality $2x-4<6-3x\leq 21$is $-5\leq x<2$ | True | False |