**Set and Interval Notation Worksheet**

Directions: Write each of the following in set and interval notation.

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| **INEQUALITIES** |  **SET NOTATION** | **INTERVAL NOTATION** |
| 1. x < -3 |  |  |
| 2.  |  |  |
| 3.  |  |  |
| 4.  |  |  |
| 5. range: greater than 7 |  |  |
| 7. domain: at most -6 |  |  |
| 8. range: no more than 5 |  |  |
| 9. domain: at least 45 |  |  |
| 10. domain: between 7 and 23 |  |  |
| 11. domain: All real numbers |  |  |
| 12. range: Not a whole number |  |  |
| 13.  |  |  |
| 14. domain: Between -9 and 12 inclusive  |  |  |
| 15. range: The empty set |  |  |
| 16. 3x – 5 > 17x – 1 |  |  |
| 17.  |  |  |
| 18.  |  |  |
| 19. 4(2x – 3) = – 2(x – 1) + 10x |  |  |
| 20.  |  |  |

ANSWERS

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| 1. x < -3 |  |  |
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| 5. greater than 7 |  |  |
| 7. at most -6 |  |  |
| 8. no more than 5 |  |  |
| 9. at least 45 |  |  |
| 10. between 7 and 23 |  |  |
| 11. All real numbers |  |  |
| 12. Not a whole number |  | Not possible |
| 13.  |  |  |
| 14. Between -9 and 12 inclusive  |  |  |
| 15. The empty set |  | Not possible |
| 16. 3x – 5 > 17x – 1 |  |  |
| 17.  |  |  |
| 18.  |  |  |
| 19. 4(2x – 3) = – 2(x – 1) + 10x |  | Not possible |
| 20.  |  |  |