**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per.\_\_\_\_\_\_\_ Score:\_\_\_\_\_**

**U6 HW #3** *Write Equations for Lines Given Two Points*

**Directions:** Write the equation of the line that passes through the points given.

|  |  |  |
| --- | --- | --- |
| 1. (0, 2) and ($-$2, 0)  | 2. (5, 0) and ($-$10, $-$5)  | 3. (1, 1) and (3, 3) |
| 4. (4, 2) and (0, $-$2) | 5. (2, 3) and ($-$2, 3) | 6. (0, $-$1) and (3, $-$2) |

**7.** Consider the three points ($-$2,4), (1, 2) and (4, *r*) on the same line. Find the value of *r* and explain your steps. Use complete sentences and show all your work.

**Directions:** Write an equation for the line from the information given in each table.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|

|  |  |
| --- | --- |
| *x* | *y* |
| $-$1 | 5 |
| 0 | 2 |
| 1 | $-$1 |
| 2 | $-$4 |

8.Equation: |

|  |  |
| --- | --- |
| *x* | *y* |
| $-$2 | 2 |
| 2 | 3 |
| 6 | 4 |
| 10 | 5 |

9. Equation:  |

|  |  |
| --- | --- |
| *x* | *y* |
| 0 | $-$1 |
| 0 | 0 |
| 0 | 1 |
| 0 | 2 |

10. Equation:  |

**Directions:** Write an equation for the line given.

|  |  |
| --- | --- |
| 11.Equation:  | 12.Equation:  |