**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: |