Make it Linear!

**Patterning and Algebra**

**Unit 1 Line Master 6a**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Task 1**Is the relation linear?Explain how you know.

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

 | **Task 2**Is the relation linear?Explain how you know.

|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 1 | 6 |
| 3 | 10 |
| 4 | 12 |
| 5 | 14 |

 |
| **Task 3**Does this represent a linear relation?Explain how you know.You get paid $15 an hour. | **Task 4**Explain how you know this relation isn’t linear, then change it so it is.

|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 1 | 12 |
| 3 | 4 |
| 4 | 2 |
| 2 | 8 |

 |

 Make it Linear! (cont’d)

**Patterning and Algebra**

**Unit 1 Line Master 6b**

|  |  |
| --- | --- |
| **Task 5**Does this equation represent a linear relation?Show how you know.*y* = 3*x* – 1 | **Task 6**Two ordered pairs are given.Write at least 2 more pairs so that the set represents a linear relation.Show your work.(2, 5) (5, 11) |
| **Task 7**Make a linear relation with the following condition:Every time the *x*-value increases by 1, the *y*-value decreases by 3.Express the relation as a table of values and an equation. | **Task 8**How do you know the relation in this graph is not linear?Change the graph so it is linear. |

 Make it Linear! (cont’d)

**Patterning and Algebra**

**Unit 1 Line Master 6c**

|  |  |
| --- | --- |
| **Graph to use for Task 8 solution** | **Graph to use for Task 8 solution** |
| **Graph to use for Task 8 solution** | **Graph to use for Task 8 solution** |