BLM 4.21 Answers

Extra Practice 2 – Master 4.21

Lesson 4.2

**1. a) i)** Yes

**iii)** As *x* increases by 1, *y* increases by 7.

**b)** **i)** No

**ii)** As *x* increases by 2, *y* does not increase by a constant number.

**c) i)** Yes

**iii)** As *x* decreases by 2, *y* increases   
 by 3.

**d) i)** No

**ii)** As *x* increases by 1, *y* does not increase by a constant number.

**2.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **a)** | *x* | *y* |  | **b)** | *x* | *y* |  | **c)** | *x* | *y* |
|  | 1 | 6 |  |  | 1 | 7 |  |  | 4 | 9 |
|  | 2 | 10 |  |  | 3 | 3 |  |  | 2 | 14 |
|  | 3 | 14 |  |  | 5 | –1 |  |  | 0 | 19 |
|  | 4 | 18 |  |  | 7 | –5 |  |  | –2 | 24 |
|  | 5 | 22 |  |  | 9 | –9 |  |  | –4 | 29 |

**a)** As *x* increases by 1, *y* increases by 4.

**b)** As *x* increases by 2, *y* decreases by 4.

**c)** As *x* decreases by 2, *y* increases by 5.

**3.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **a)** | *x* | *y* |  | **b)** | *x* | *y* |  | **c)** | *x* | *y* |
|  | –2 | 2 |  |  | –2 | –3 |  |  | –2 | 9 |
|  | –1 | 3 |  |  | –1 | –1 |  |  | –1 | 7 |
|  | 0 | 4 |  |  | 0 | 1 |  |  | 0 | 5 |
|  | 1 | 5 |  |  | 1 | 3 |  |  | 1 | 3 |
|  | 2 | 6 |  |  | 2 | 5 |  |  | 2 | 1 |

|  |  |
| --- | --- |
| **a)** | **b)** |
|  |  |
| **c)** |  |
|  |  |

**4. a)**

|  |  |
| --- | --- |
| **Time, *n* hours** | **Total Cost, *C* ($)** |
| 1 | 130 |
| 2 | 180 |
| 3 | 230 |
| 4 | 280 |

**b)** Yes, as the time in hours increases by 1, the total cost increases by $50.

**c)** *C* = 50*n* + 80

**d)** $430