**The Rule of Four: Making Connections**

**Recall what we have learned so far in this unit:**











**Putting this all together, we can represent linear relationships in different ways.**

**The Rule of Four**

Example ➊

1. A painter charges $115 for 5 hours, $85 for 3 hours and $160 for 8 hours.

Use the rule of four to demonstrate the relation.



1. How does the vertical-intercept describe the painter’s fee?

Example ➋

The rental fees for a hardwood floor sanding machine is given in the table:

|  |  |  |  |
| --- | --- | --- | --- |
| Hours (h) | 3 | 7 | 9 |
| Cost (c) in $ | 88 | 156 | 190 |

1. Use the rule of four to demonstrate the relation.
2. Explain the meaning of the slope and the y-intercept.



* 1. Julian’s parents are hiring a caterer for his brother’s graduation party. They found this advertisement in the newspaper. They wonder what the cost per person would be if they used Joshua’s catering service. How can Julian’s parents determine the cost per person?

Example ➌

**Joshua’s Fine Foods**

|  |  |
| --- | --- |
| **Number of Guests** | **Cost**  **$** |
| 10 | 250 |
| 30 | 650 |
| 45 | 950 |
| 80 | 1650 |