

Study Guide for Module 1 - Lessons 1 through 15

Dominic works on the weekends and on vacations from school mowing lawns in his neighborhood. For every lawn he mows, he charges \$12. Complete the table. 1 = \$12

Lawns	Charge (In Dollars)	Ordered Pairs
2	\$ 24	(2, 24)
4	\$ 48	(4, 48)
6	\$ 72	(6, 72)
8	\$ 96	(8, 96)
10	\$ 120	(10, 120)

A) What is the ratio of the number of dollars Dominic charges and the number of lawns that he mows.

$$\frac{24}{2} = \$12$$

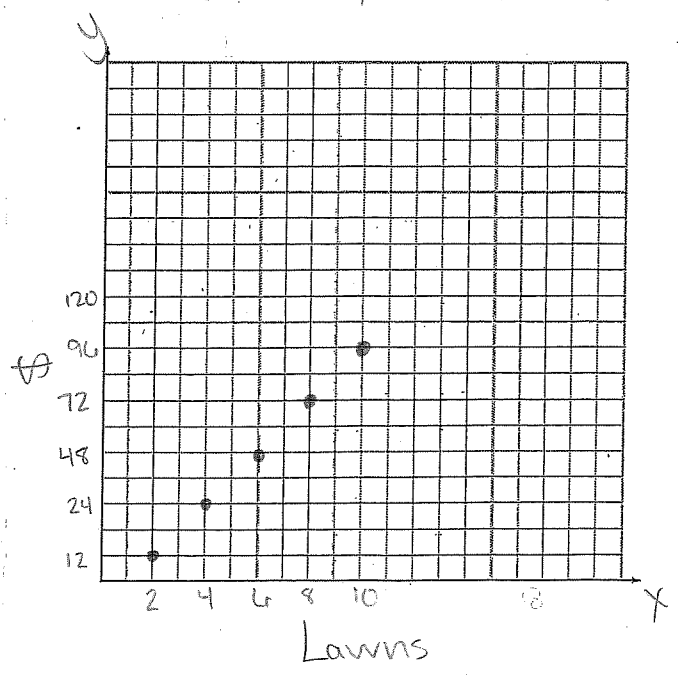
B) Plot the values from the table on a coordinate plane. Label the axes. Then use the graph to find the number of lawns Dominic will need to mow to make \$240.

11 → \$ 132
12 → \$ 144

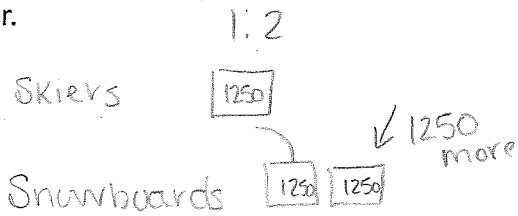
$\frac{\$240}{\$12/\text{lawn}} = 20$ 20 → \$ 240

Dominic will need to mow 20 lawns.

Money Dominic Makes



The Aspen Ski Resort has started to keep track of the number of skiers and snowboards who bought season passes. The ratio of the number of skiers who bought season passes to the number of snowboarders who bought season passes is 1:2. If 1,250 more snowboarders bought season passes than skiers, how many snowboarders and how many skiers bought season passes. Use a table, graph or a tape diagram to justify your answer.



Skiers: 1250

Snowboarders 2500

$$\begin{array}{r} 1250 \\ \times 2 \\ \hline 2500 \end{array}$$

Mario and David are making orange juice. Mario mixed 15 cups of water with 4 cups of juice concentrate. David made his juice by mixing 8 cups of water with 3 cups of juice concentrate. Create two ratio tables, one for Mario and one for David. Use the ratio tables to compare the ratios of juice concentrate to water using ratio tables. State which beverage has a higher juice concentrate to water ratio.

Mario

Water	Juice
15	4
30	8
45	12
60	16

David:

Water	Juice
8	3
16	6
24	9

$$\begin{array}{r} 3 \\ 4 \overline{)15} \\ \underline{-12} \\ 3 \end{array}$$

$$\frac{15}{4} = 3\frac{3}{4}$$

$$\frac{8}{3} = 2\frac{2}{3}$$

Mario has the higher juice to water ratio.