## MY Homework

## Lesson 9

Graph Patterns

## Homework Helper

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Lance is helping his dad remodel their house. He cuts boards with lengths of $\mathbf{2}$ feet and 8 feet. Find the amount of material needed for $1,2,3$, and 4 boards of each length. Then graph the results as ordered pairs on a coordinate plane. How many more feet of 8 -foot boards would there be if Lance cuts $\mathbf{3}$ boards of both lengths?

1
Complete the tables below.

| 2-Foot Board |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Number of Boards | 1 | 2 | 3 | 4 |
| Length (ft) | 2 | 4 | 6 | 8 |


| 8-Foot Board |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Number of Boards | 1 | 2 | 3 | 4 |
| Length (ft) | 8 | 16 | 24 | 32 |

2
Generate ordered pairs. Let each $x$-coordinate represent the number of boards. Let each $y$-coordinate represent the length in feet of each board.

2-Foot Board
$(1,2),(2,4),(3,6),(4,8)$

## 8-Foot Board

$(1,8),(2,16),(3,24),(4,32)$

Graph each set of ordered pairs on a coordinate plane.
If Lance cuts 3 boards of both lengths, he will have 6 feet of 2 -foot boards and 24 feet of 8 -foot boards.
$24-6=18$


So, there will be 18 more feet of 8 -foot Number of Boards boards if he cuts 3 boards of both lengths.

## Problem Solving

Mathematical

1. PRACTICE 4

Model Math Jarrett walks his puppy outside every day for 30 minutes. Angela walked her puppy every day for 90 minutes. Find the number of minutes that each puppy was walked for $1,2,3$, and 4 days. Then graph the results as ordered pairs. How many more minutes does Angela spend walking her puppy over 2 days compared to Jarrett walking his puppy over 2 days?


## Test Practice

2. Emily drinks 6 cups of water every day, while Jackie drinks 8 cups of water every day. Which graph represents the total amount of water consumed by Emily and Jackie over a 4-day period?
(A)

(B)

(C)

(D)

Water Intake


