

January 24, 2018, 8:00 a.m.-12:00 p.m.  
Harrisonburg, VA



## Handout 8: Covering Tables

Paula has fabric that is 4 yards long. She needs a length of  $\frac{3}{4}$  of a yard of cloth to cover 1 table.

She needs to find out how many tables of the same size she can cover with 4 yards of cloth.

a) Show 2 different visual representations that can be used to help answer the problem.

b) How many tables can Paula cover with  $\frac{3}{4}$  of a yard of cloth on each of them?

The number of tables Paula can cover is...

c) How many yards of cloth will be left over after using  $\frac{3}{4}$  of a yard of cloth for each table?

The number of yards left over is...

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d) Paula worked out the problem like this:

$$\begin{array}{l}
 4 \text{ divided by } \frac{3}{4} \\
 4 \div \frac{3}{4} \\
 \frac{4}{1} \times \frac{4}{3} = \frac{16}{3} \\
 \begin{array}{r}
 3 \overline{)16} \\
 \underline{15} \\
 1 \\
 5 \frac{1}{3}
 \end{array}
 \end{array}$$

How does Paula's work relate to the diagrams you created in part (a) of this task?

e) Fill in the ratio tables.

Yards of Cloth	Tables
1	
2	
3	
4	

Tables	Yards of Cloth
1	
2	
3	
4	

f) How does Paula's work relate to the values in the ratio tables?

g) What are the two unit rates? (tables per 1 yard of cloth, yards of cloth per 1 table)

h) Answer the following questions using the unit rates you wrote above:

- 1) How many tables can be covered with 15 yards of cloth?
  
- 2) How many yards of cloth will it take to cover 40 tables?