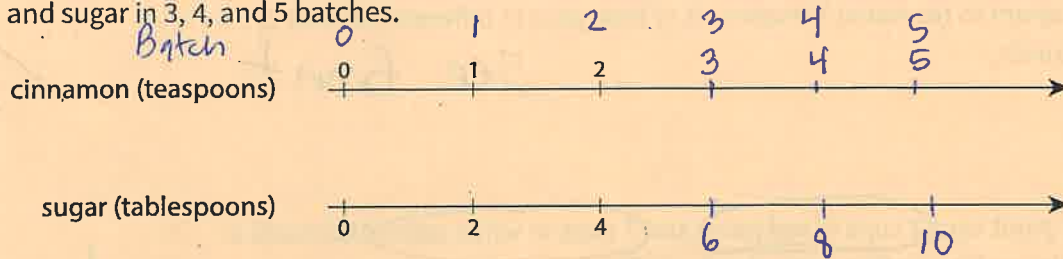KEY

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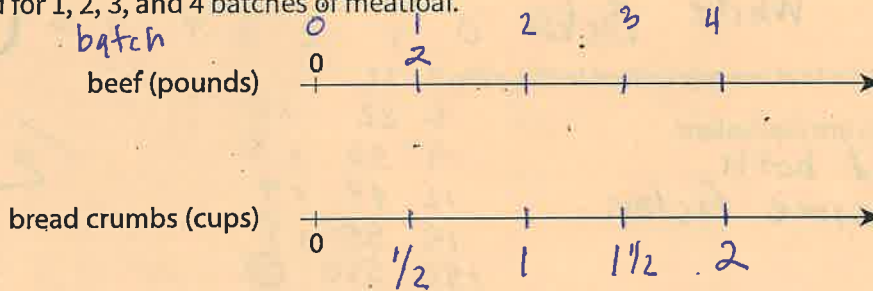NAME   DATE   PERIOD

Unit 2, Lesson 7
Practice Problems

1. A recipe for cinnamon rolls uses 2 tablespoons of sugar per ~~teaspoon~~ ONE teaspoon of cinnamon for the filling. Complete the double number line diagram to show the amount of cinnamon and sugar in 3, 4, and 5 batches.

   Batch   0   1   2   3   4   5

   cinnamon (teaspoons)   0   1   2   3   4   5

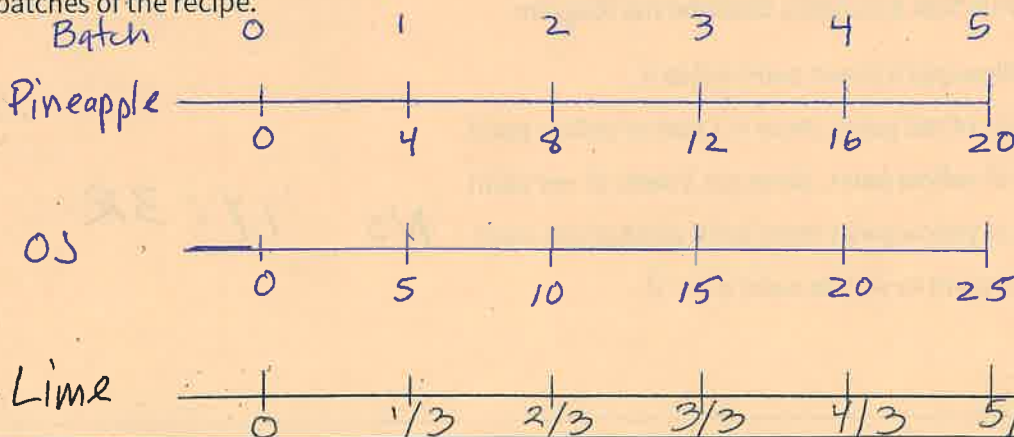   sugar (tablespoons)   0   2   4   6   8   10

   /2

2. One batch of meatloaf contains 2 pounds of beef and $\frac{1}{2}$ cup of bread crumbs. Complete the double number line diagram to show the amounts of beef and bread crumbs needed for 1, 2, 3, and 4 batches of meatloaf.

   batch   0   1   2   3   4

   beef (pounds)   0   2

   bread crumbs (cups)   0   ½   1   1½   2

   /2

3. A recipe for tropical fruit punch says, "Combine 4 cups of pineapple juice with 5 cups of OJ orange juice."

   a. Create a double number showing the amount of each type of juice in 1, 2, 3, 4, and 5 batches of the recipe.

   Batch   0   1   2   3   4   5

   Pineapple   0   4   8   12   16   20

   OJ   0   5   10   15   20   25

   Lime   0   1/3   2/3   3/3   4/3   5/3

   1   1⅓   1⅔

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b. If 12 cups of pineapple juice are used with 20 cups of orange juice, will the recipe taste the same? Explain your reasoning.

It would be too orangey

No $\times 3\left(\begin{array}{c} 4 \quad PA:50) \\ 12 \quad\quad 15 \end{array}\right)\times 3$ → not 20
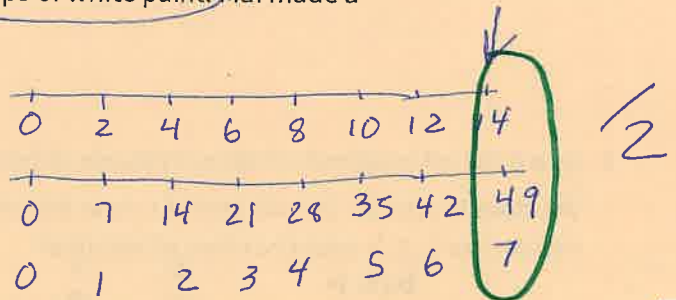
c. The recipe also calls for $\frac{1}{3}$ cup of lime juice for every 5 cups of orange juice. Add a line to your diagram to represent the amount of lime juice in different batches of tropical fruit punch.

See front   /3

4. One batch of pink paint uses 2 cups of red paint and 7 cups of white paint. Mai made a large amount of pink paint using 14 cups of red paint.

   a. How many batches of pink paint did she make? R
      7 batches   7

   b. How many cups of white paint did she use?

   $\times 7\left(\begin{array}{c} R \\ 2 \\ 14 \end{array}\right.$ $\left.\begin{array}{c} W \\ 7 \\ 49 \end{array}\right)\times 7$ *49 cups White*

   W
   Batch

   R: 0 2 4 6 8 10 12 14
   W: 0 7 14 21 28 35 42 49
   Batch: 0 1 2 3 4 5 6 7

   /2

5. a. Find three different ratios that are equivalent to the ratio 3 : 11.

      6:22   ×2
      9:33   ×3
      12:44 ×4
      15:55 ×5
      150:550 ☺

   b. Explain why your ratios are equivalent.
      Multiplied both parts by same factor.

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6. Here is a diagram that represents the pints of red and yellow paint in a mixture.

   pints of red paint   6   3

   pints of yellow paint 2   1
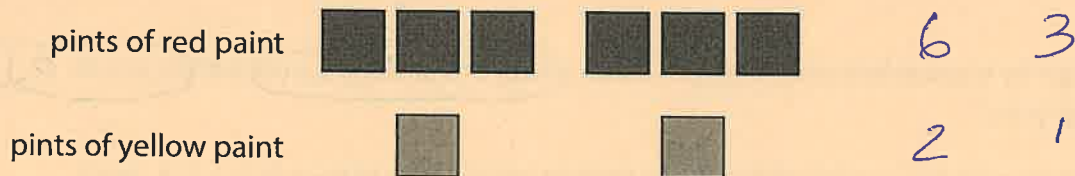
   Select **all** statements that accurately describe the diagram.

   A. The ratio of yellow paint to red paint is 2 to 6.
   B. For every 3 pints of red paint, there is 1 pint of yellow paint.
   C. For every pint of yellow paint, there are 3 pints of red paint.
   D. For every pint of yellow paint there are 6 pints of red paint.   *No   1Y:3R*
   E. The ratio of red paint to yellow paint is 6 : 2.

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