Name Date

Enrichment and Extension

5.2

The Big Paint “Mix Up”

Oh no! The paint mixing machine has gone crazy! Can you help figure out how to fix these batches by adding the least amount of paint possible? Otherwise all the paint will go to waste. For each situation, tell how much of one or more colors should be added to each batch. The machine can only measure in cups, pints, quarts, and gallons.

1. *Brick Red* is supposed to be 7 parts red to 2 parts blue. Today, the machine mixed 35 quarts of red with 5 quarts of blue.

2. *Ocean Blue* is supposed to be 8 parts blue to 3 parts yellow. Today, the machine mixed 55 quarts of blue with 15 quarts of yellow.

3. *Sour Apple* is supposed to be 9 parts yellow to 2 parts blue. Today, the machine mixed 2 gallons of yellow with 2 quarts of blue.

4. *Midnight Navy* is supposed to be 7 parts blue to 3 parts red. Today, the machine mixed 3 quarts of blue with 1 pint of red.

5. *Sunset Yellow* is supposed to be 6 parts yellow to 1 part red. Today, the machine mixed 70 pints of yellow with 11 pints of red.

6. The last correct batch of *Burnt Orange* had 15 quarts of yellow and   
30 quarts of red. Today, the machine mixed 42 gallons of yellow with   
72 gallons of red.

7. The last correct batch of *Perfectly Grape* had 20 pints of red and 24 pints   
of blue. Today, the machine mixed 28 quarts of red with 32 quarts of blue.

8. The last correct batch of *Mustard Brown* had 96 pints of yellow, 72 pints   
of red, and 24 pints of blue. Today the machine mixed 45 cups of yellow, 20 cups of red, and 8 cups of blue.