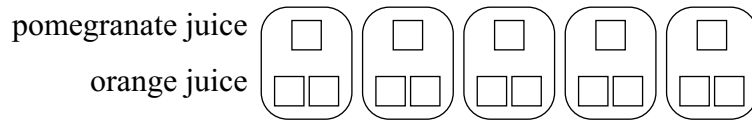Name_____

## Part-Part-Whole Ratios

Date_____ Period_____

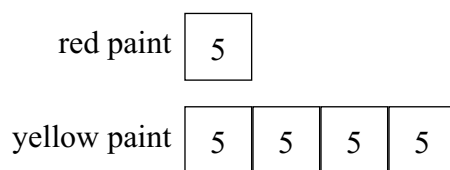**Solve the ratio problem.  A batch diagram representing the part-part-whole ratio is provided.**

1)  A recipe for fruit punch calls for 1 part pomegranate juice and 2 parts orange juice.  How many cups of pomegranate juice and how many cups of orange juice do you need in order to make 15 cups of this fruit punch?

pomegranate juice

orange juice

**Sketch a batch diagram to represent the part-part-whole ratio and then solve the ratio problem.**

2)  A simple snack recipe calls for 2 cups of toasted oats and 3 cups of chocolate chips.  How many cups of toasted oats and how many cups of chocolate chips do you need in order to make 30 cups of this snack?

**Solve the  ratio problem.  A tape diagram representing the part-part-whole ratio is provided.**

3)  Mixing 1 part red paint with 4 parts yellow paint makes a desired orange paint.  Assuming you have as much yellow paint as you need, how many cans of this orange paint can you make with 5 cans of red paint?

red paint | 5

yellow paint | 5 | 5 | 5 | 5

**Sketch a tape diagram to represent the part-part-whole ratio and then solve the ratio problem.**

4)  A recipe for fruit punch calls for 4 parts pineapple juice and 3 parts cranberry juice.  Assuming you have as much cranberry juice as you need, how many cups of this fruit punch can you make with 16 cups of pineapple juice?

**Solve the ratio problem.  A double number line representing the part-part-whole ratio is provided.**

5) A recipe for fruit punch calls for 2 parts orange juice and 5 parts apple juice.  How many cups of this fruit punch can you make with 8 cups of orange juice and 21 cups of apple juice?  If any cups of orange juice or cups of apple juice are left over, state how many.

orange juice    0    2    4    6    8

apple juice    0    5    10    15    20
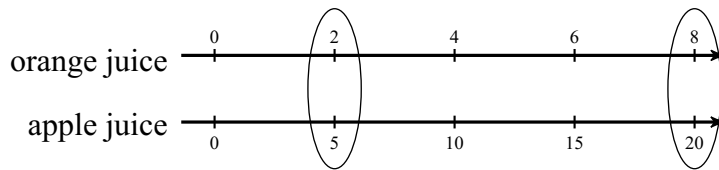
**Sketch a double number line to represent the part-part-whole ratio and then solve the ratio problem.**

6) Mixing 2 parts red paint with 9 parts yellow paint makes a desired orange paint.  How many cans of this orange paint can you make with 4 cans of red paint and 21 cans of yellow paint?  If any cans of red paint or cans of yellow paint are left over, state how many.
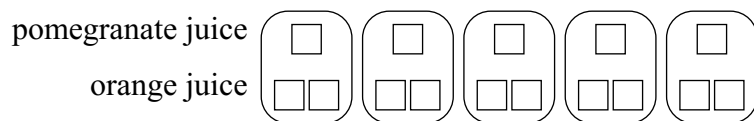
**Solve each ratio problem.**

7) Mixing 6 parts red paint with 5 parts yellow paint makes a desired orange paint.  How many cans of red paint and how many cans of yellow paint are needed to make 33 cans of this orange paint?

8) A recipe for fruit punch calls for 4 parts grape juice and 3 parts cranberry juice.  Assuming you have as much cranberry juice as you need, how many cups of this fruit punch can you make with 8 cups of grape juice?

9) A simple snack recipe calls for 1 cup of chocolate chips and 4 cups of toasted oats.  How many cups of this snack can you make with 4 cups of chocolate chips and 19 cups of toasted oats?  If any cups of chocolate chips or cups of toasted oats are left over, state how many.

Name_____

# Part-Part-Whole Ratios

Date_____ Period_____

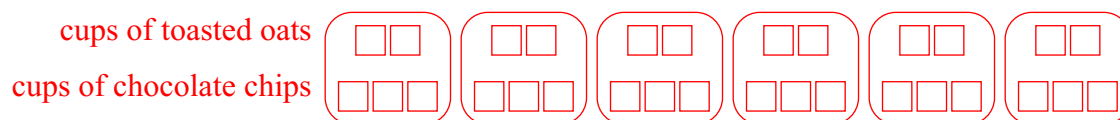**Solve the ratio problem.  A batch diagram representing the part-part-whole ratio is provided.**

1)  A recipe for fruit punch calls for 1 part pomegranate juice and 2 parts orange juice.  How many cups of pomegranate juice and how many cups of orange juice do you need in order to make 15 cups of this fruit punch?

pomegranate juice

orange juice

5 cups of pomegranate juice, 10 cups of orange juice

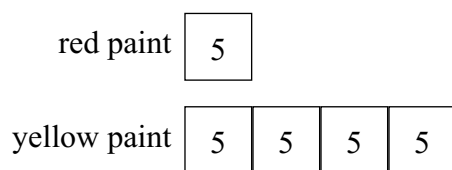**Sketch a batch diagram to represent the part-part-whole ratio and then solve the ratio problem.**

2)  A simple snack recipe calls for 2 cups of toasted oats and 3 cups of chocolate chips.  How many cups of toasted oats and how many cups of chocolate chips do you need in order to make 30 cups of this snack?

cups of toasted oats

cups of chocolate chips

12 cups of toasted oats, 18 cups of chocolate chips

**Solve the  ratio problem.  A tape diagram representing the part-part-whole ratio is provided.**

3)  Mixing 1 part red paint with 4 parts yellow paint makes a desired orange paint.  Assuming you have as much yellow paint as you need, how many cans of this orange paint can you make with 5 cans of red paint?

red paint | 5

yellow paint | 5 | 5 | 5 | 5

25 cans of orange paint

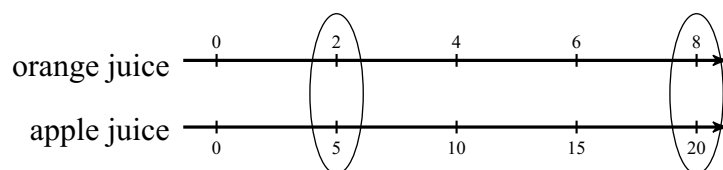**Sketch a tape diagram to represent the part-part-whole ratio and then solve the ratio problem.**

4)  A recipe for fruit punch calls for 4 parts pineapple juice and 3 parts cranberry juice.  Assuming you have as much cranberry juice as you need, how many cups of this fruit punch can you make with 16 cups of pineapple juice?

pineapple juice | 4 | 4 | 4 | 4

cranberry juice | 4 | 4 | 4

28 cups of fruit punch

**Solve the ratio problem. A double number line representing the part-part-whole ratio is provided.**

5) A recipe for fruit punch calls for 2 parts orange juice and 5 parts apple juice. How many cups of this fruit punch can you make with 8 cups of orange juice and 21 cups of apple juice? If any cups of orange juice or cups of apple juice are left over, state how many.

orange juice   0   2   4   6   8

apple juice   0   5   10   15   20

28 cups of fruit punch, 1 cup of apple juice left over

**Sketch a double number line to represent the part-part-whole ratio and then solve the ratio problem.**

6) Mixing 2 parts red paint with 9 parts yellow paint makes a desired orange paint. How many cans of this orange paint can you make with 4 cans of red paint and 21 cans of yellow paint? If any cans of red paint or cans of yellow paint are left over, state how many.

red paint   0   2   4
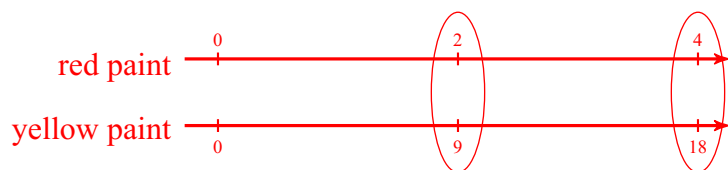
yellow paint   0   9   18

22 cans of orange paint, 3 cans of yellow paint left over

**Solve each ratio problem.**

7) Mixing 6 parts red paint with 5 parts yellow paint makes a desired orange paint. How many cans of red paint and how many cans of yellow paint are needed to make 33 cans of this orange paint?

18 cans of red paint, 15 cans of yellow paint

8) A recipe for fruit punch calls for 4 parts grape juice and 3 parts cranberry juice. Assuming you have as much cranberry juice as you need, how many cups of this fruit punch can you make with 8 cups of grape juice?

14 cups of fruit punch

9) A simple snack recipe calls for 1 cup of chocolate chips and 4 cups of toasted oats. How many cups of this snack can you make with 4 cups of chocolate chips and 19 cups of toasted oats? If any cups of chocolate chips or cups of toasted oats are left over, state how many.

20 cups of snack mix, 3 cups of toasted oats left over