*PACKETS*

Name_____Class_____Date_____

# Weekly Practice Packet #8:
## Intro to Ratios and Equivalent Ratios

The weekly practice packet is due on _____.

Complete the problems in the packet throughout the week as you learn more about each skill or concept. It is important that you try your best and persevere when solving each problem or answering each question. **The weekly practice packet counts as a 10-point nightly practice grade.**

## If you get stuck do the following:

1. Refer to your class notes, practice sheets, and warm-ups.
2. Take a break and try the problem or question again.
3. Attend Mrs. Brightman's extra help sessions.
4. Still having trouble? Write a statement stating why you are having difficulty on the problem or question.
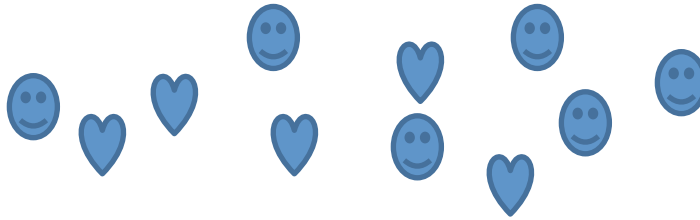
## PART I: VOCABULARY

Complete flashcards for the vocabulary words listed below. The definitions for these words can be found in class notes. These words appear throughout the packet and the flashcards will be most useful in becoming more familiar with their definitions.

**Ratios**         **Equivalent Ratios**         **Rates**

**PART II: INTRO TO RATIOS  (notes page 1)**

1. What are the three different ways to represent a ratio?

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2. Write the ratio of hearts to smiley faces in three different ways.

   1.)

   2.)

   3.)

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3. Simplify 24:30.

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4. Write a rate that represents the following situation.

   *CJ bought two game controllers at Game Stop for $75.*

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5. Complete the table below.

   4 notebooks to 3 pencils

| Notebooks | 4 |    | 16 |    |
|-----------|---|----|----|----|
| Pencils   | 3 | 15 |    | 21 |

6. Fill in the blanks below.

    In the fruit bowl there are 6 bananas, 4 apples, and 3 oranges.

    a. For every 4 _____, there are 3 _____.

    b. The ratio of _____ to _____ is 6:3.

    c. The ratio of _____ to _____ is 4 to 6.

    d. For every 1 orange, there are _____ bananas.

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## PART III:  EQUIVALENT RATIOS (notes pages 2, 3, 4, 5, 6)

7. Explain how you can you determine if two ratios are equivalent?

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8. Write two ratios that are equivalent to 7:9.

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9. Are $\dfrac{9}{12}$ and $\dfrac{27}{36}$ equivalent?  Explain your reasoning.

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10. There are 14 boys and 6 girls in Mrs. Brightman's homeroom.  There are 12 boys and 8 girls in  Mrs. Aulisio's homeroom.  Is the ratio of boys to girls in both classes equivalent?  Explain.

11. The diagram below represents 3 batches of light yellow paint.
   Draw a diagram that represents 1 batch of the same shade of light yellow paint.

white paint (cups)     ▢▢▢▢▢▢▢▢

yellow paint (cups)   ■■■■■■■■■■■■■■■

White paint (cups):

Yellow paint (cups):

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12. Use equivalent ratios to find the missing value.  Show all of your thinking.

a.) $\dfrac{\square}{18} = \dfrac{7}{3}$

b.) $\dfrac{32}{12} = \dfrac{\square}{3}$

c.) $\dfrac{21}{43.62} = \dfrac{7}{\square}$

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13. Use equivalent ratios to find the missing value.  Show all of your thinking.

a.) $\dfrac{10}{45} = \dfrac{4}{\square}$

b.) $\dfrac{16}{\square} = \dfrac{12}{33}$

c.) $\dfrac{\square}{64} = \dfrac{49}{56}$

14. Emma can make 2 bracelets every 3 hours.  How many bracelets can she make in a day?  Convince me by showing your proof below.  Write your answer in a complete sentence.

Sentence: _____

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15. Maddie gets a hit 2 out of every 5 times at bat.  How many hits can she expect if she is at bat 30 times?   Convince me by showing your proof below.  Write your answer in a complete sentence.

Sentence: _____

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16. Ryan can jump 8 times in 10 seconds, how many jumps can he make in 45 seconds at that rate? Convince me by showing your proof below.  Write your answer in a complete sentence.

Sentence: _____

17. Jake can type 55 words in 60 seconds.  How many words can he type in 2 minutes? Convince me by showing your proof below.  Write your answer in a complete sentence.

Sentence: _____

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18. How are adding and subtracting decimals similar?

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19. Find the following sum.  Show all of your work below.

$$34 + 18.521 + 0.42$$

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20. Find the following difference.  Show all of your work below.

$$37 - 12.843$$

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21. How is multiplying decimals different from adding and subtracting decimals?

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22. Find the following products.  Show all of your work below.

a.) $1.34 \times 6.2$

b.) $0.3 \times 4.58$