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Modified In-School Off-School Approach Modules (MISOSA)
Distance Education for Elementary Schools
SELF-INSTRUCTIONAL MATERIALS



EXPRESSING RATIO



Department of Education
BUREAU OF ELEMENTARY EDUCATION
2nd Floor Bonifacio Building
DepEd Complex, Meralco Avenue
Pasig City

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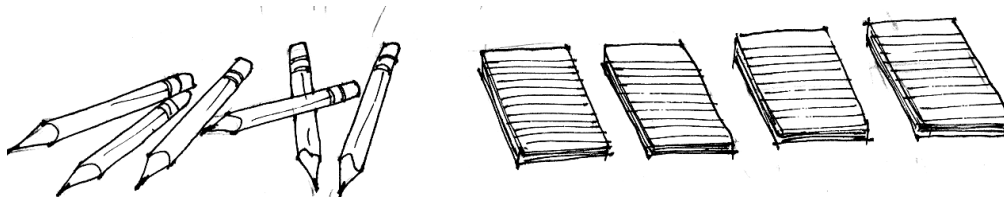
EXPRESSING RATIO

Objective: Express the ratio of two numbers using the appropriate notation



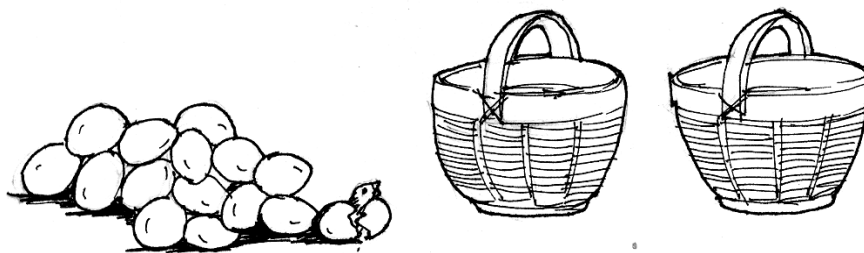
Write the ratio of the following:

1.



- pencils to notebooks
- notebooks to pencils
- pencils to total numbers of things
- notebooks to total number of things

2.

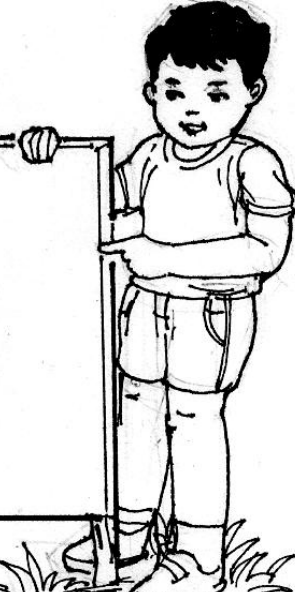


- eggs to baskets
- baskets to eggs
- eggs to total number of things
- baskets to total things





Study and Learn



There are 7 boys and 8 girls playing volleyball.

Questions:

1. What is the ratio of boys to girls?
2. What is the ratio of girls to players?
3. What is the ratio of boys to players?
4. How do we express ratio of 2 numbers?

The ratio of boys to girls is 7 to 8.

The ratio of girls to boys is 8 to 7.

The ratio of girls to players is 8 to 15.

The ratio of boys to players is 7 to 15.

What are other ways of expressing the ratio of 2 numbers?

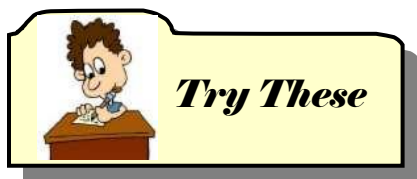
Look at this:

7 to 8 can be expressed as 7:8 or $\frac{7}{8}$

7 to 15 can be expressed as 7:15 or $\frac{7}{15}$

We can express ratio of 2 numbers using a fraction or the symbol $_:_$.





Express the ratio of the following in two ways.

Colon

Fraction

1. Noemi has 18 tiger's eye marbles and Gali has 15 agate marbles. What is the ratio of Noemi's marbles to Gali's?
2. Laura ran 2 kilometres in 25 minutes. What is the ratio of time to distance?
3. On Monday, player A won 2 times in 4 chess games. On Tuesday, he won once in 3 tries. What is the ratio of total winnings to total chess games?
4. Candies cost ₱2 for 3 pieces. What is the ratio of 3 pieces of candies to the total cost?
5. Jumbo, my dog, had 9 puppies. Four were black and 5 were white. What is the ratio of white to black puppies?



We can express the ratio of two numbers as a fraction or using the notation ____:____.





Write the ratio of the following:

Colon

Fraction

1. In my mother's flower garden, she has 15 variety of roses and 16 variety of orchids. What is the ratio of orchids to roses?
2. In item #1, what is the ratio of the variety of roses to all plants?
3. Devini's hobby is collecting stamps. She had collected 189 US stamps and 217 Philippine stamps. What is the ratio of US stamps to the total of stamps collected?
4. There are 85 Math books and 65 Science books in the library. What is the ratio of Math books to Science books?
5. In item #5, what is the ratio of Science books to Math books?

Check your answer with the answer key.
If you get...

- 4-5 Excellent! You may now proceed to the next lesson.
- 3 You need to review the processes you missed.
- 0-2 You need to repeat the whole process. Ask your teacher or elder to help you.





Key to Correction EXPRESSING RATIO

REVIEW

1) a. $6:4$ or $\frac{6}{4}$

b. $4:6$ or $\frac{4}{6}$

c. $6:10$ or $\frac{6}{10}$

d. $4:10$ or $\frac{4}{10}$

2) a. $15:2$ or $\frac{15}{2}$

b. $2:15$ or $\frac{2}{15}$

c. $15:17$ or $\frac{15}{17}$

d. $2:17$ or $\frac{2}{17}$

TRY THESE

1) $18:15$, $\frac{18}{15}$

2) $25:2$, $\frac{25}{2}$

3) $3:7$, $\frac{3}{7}$

4) $3:2$, $\frac{3}{2}$

5) $5:4$, $\frac{5}{4}$

ON YOUR OWN

1) $16:15$, $\frac{16}{15}$

2) $15:31$, $\frac{15}{31}$

3) $189:406$, $\frac{189}{406}$

4) $85:65$, $\frac{85}{65}$

5) $65:85$, $\frac{65}{85}$

