Warm up Grade 6

Date: Jan 30

Chapter 5

Lesson 4 Day 2

Example: There are 5 pups, 2 are boys, and 3 are girls

Part-to-Part:

The ratio of boys to girls is

Boys : Girls

2 : 3

The ratio of girls to boys is

Girls to Boys

3 : 2

Part-to-Whole:

The ratio of boys to **all** pups is

Boys to total

2 : 5

$\frac{2}{5}$

The ratio of girls to **all** pups is

Girls : All

3 : 5

$\frac{3}{5}$

Practice

1. Write each ratio 2 ways.

a) apples to pears

Apples to Pear

4 to 3

4 : 3

b) caps to scarves

Hats to Scarves

5 to 6

5 : 6

c) roses to daisies

Roses to Daisies

1 to 4

1 : 4

2. Write a ratio to show the numbers of:

a) ladybugs to ants
b) ants to ladybugs
c) ladybugs to insects
d) ants to insects

a) Ladybugs to ants

3 : 7

b) Ants to Ladybugs

7 : 3

c) Ladybugs to insects

3 : 10

d) Ants to Insects

7 : 10

3. Write each ratio in as many ways as you can.

a) red marbles to green marbles
b) green marbles to all the marbles
c) green marbles to red marbles
d) red marbles to all the marbles

a) Red: Green

10 : 4

b) Green : All

4 : 14

c) Green: Red

4 : 10

d) Red : All

10 : 14

4. Ms. Zsabo has 13 girls and 11 boys in her class. Write each ratio.

a) girls to boys
b) boys to girls
c) boys to students
d) girls to students

a) G : B

13: 11

b) B : G

11: 13

c) B : Stu

11: 24

d) G : Stu

13: 24

1 batch of cookies : 20 cookies (×4 on cookies, ×4 on cakes)

4 : 80

4 batches →

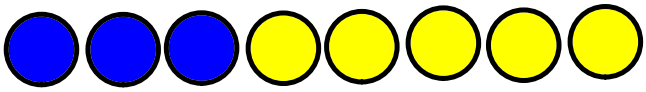
5. What is being compared in each ratio?

a) 3:4 Cats: Dogs b) $\frac{4}{7}$ Dogs: Pets

c) 3 to 7 Cats: Pets d) 4:3 Dogs: Cats

3 to 5

6. Use counters to model the ratio 3:5 in 2 different ways.
Draw diagrams to record your work.
Explain each diagram.



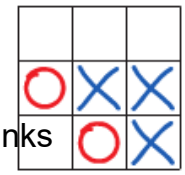
Blue : whole

3: 8

Yellow : whole

5 : 8

7. Write 4 different ratios for this picture.
Explain what each ratio compares.



X:O

3:2

O:X

2:3

X: Total blanks

3: 9

O: Total blanks

2: 9

8. A penny can show heads or tails.
Place 10 pennies in a cup. Shake and spill.
Write as many ratios as you can for the pennies.

9. Write a ratio to show the numbers of:

a) triangles to squares 2:3

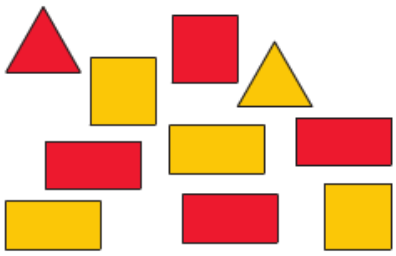
b) squares to rectangles 3:4

c) triangles to all shapes 2:10

d) red shapes to yellow shapes 5:5

e) yellow triangles to yellow rectangles 1:2

f) red triangles to yellow squares 1:2



10. Write as many ratios as you can for the trail mix recipe.
Explain what each ratio compares.

Raisins: nuts: papaya: Seeds

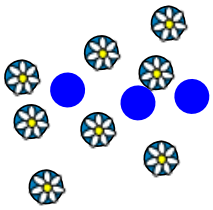
1 : 3 : 2 : 1

11. Use 11 counters to show each ratio.
Sketch counters to record your work.

a) 5:6

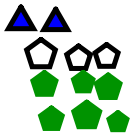
stars: face

b) 8 to 3



Flower: Rainbow

c) $\frac{2}{11}$



Triangle: all shapes

d) 6:11

Green Pentagons: all shapes

1. What is the ratio of skidoo's to four wheelers?

2. What is the ratio of four wheelers to skidoo's?

3. What is the ratio of skidoo's to all vehicles?

4 : 7

4 What is the ratio of four wheelers to all vehicles?

3 : 7

1) Ski : ATV
4 : 3

2) ATV : Ski
3 : 4

What is being compared in each ratio?

1. 8 : 4

Pizza : Burger

2. 8: 12

Pizza : Total

3. 4 : 12

Burger : Total

4. 4 : 8

Burger : Pizza

Equivalent Fraction

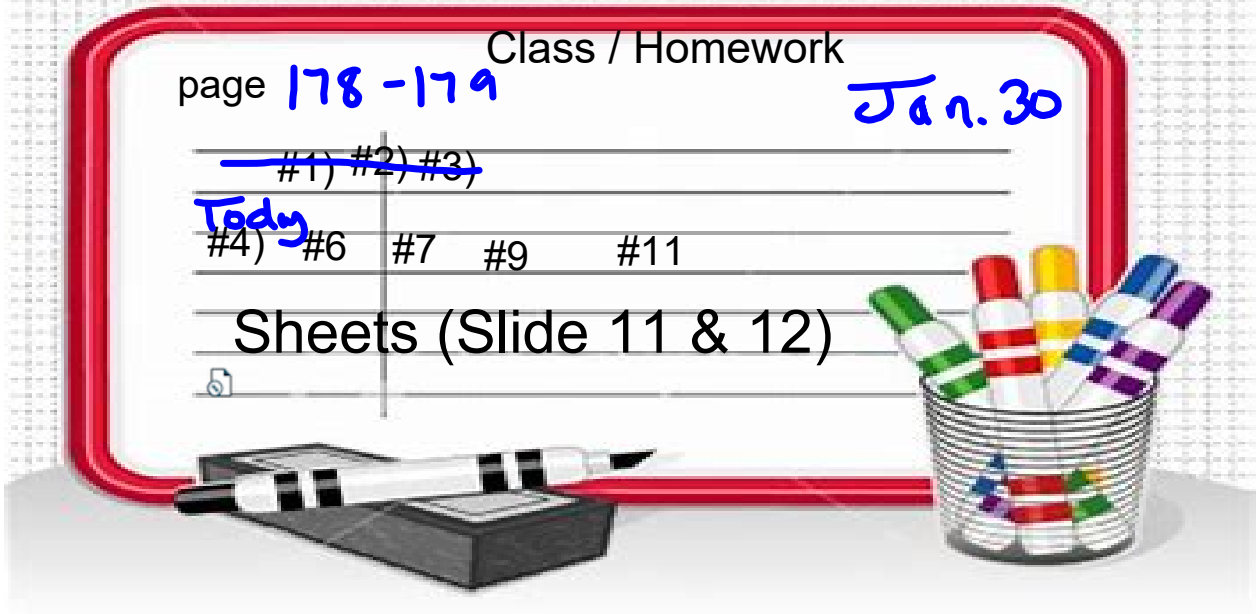
↳ x or ÷ both top and bottom by the same #

Ex) $\frac{45}{40} \begin{matrix} \div 5 \\ \div 5 \end{matrix}$ $\frac{9}{8}$

Ex) $\frac{3}{5} \begin{matrix} \times 5 \\ \times 5 \end{matrix} = \frac{15}{25}$

$\frac{5}{5} = 1$

If this is understood move onto next lesson



Practice

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   a) apples to pears

   b) caps to scarves

   c) roses to daisies

2. Write a ratio to show the numbers of:
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   b) ants to ladybugs
   c) ladybugs to insects
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4. Ms. Zsabo has 13 girls and 11 boys in her class.
   Write each ratio.
   a) girls to boys
   b) boys to girls
   c) boys to students
   d) girls to students

5. What is being compared in each ratio?

a) 3:4 b) $\frac{4}{7}$

c) 3 to 7 d) 4:3

6. Use counters to model the ratio 3:5 in 2 different ways.
Draw diagrams to record your work.
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7. Write 4 different ratios for this picture.
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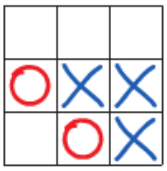

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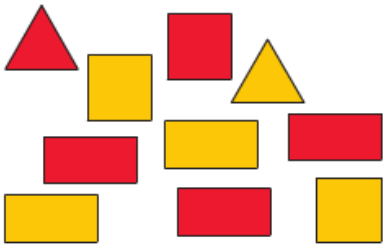
f) red triangles to yellow squares



10. Write as many ratios as you can for the trail mix recipe.
Explain what each ratio compares.

TRAIL MIX
1 scoop raisins
3 scoops nuts
2 scoops dried papaya
1 scoop sunflower seeds

11. Use 11 counters to show each ratio.
Sketch counters to record your work.

a) 5:6 **b)** 8 to 3 **c)** $\frac{2}{11}$ **d)** 6:11

Name : _____ Score : _____

Ratio In Three Ways: Part to Part

Sheet 1

Write the ratio in three different ways.

1) Books to pens

Words : _____
Ratio : _____
Fraction : _____

2) Pumpkins to cabbages

Words : _____
Ratio : _____
Fraction : _____

3) Spiders to ladybugs

Words : _____
Ratio : _____
Fraction : _____

4) Apples to mangosteens

Words : _____
Ratio : _____
Fraction : _____

5) Snow cones to chocolates

Words : _____
Ratio : _____
Fraction : _____

Printable Math Worksheets @ www.mathworksheets4kids.com

Name : _____ Score : _____

Ratio: Part to Part

Level 1: S1

1) 

The ratio of  to  = ☐

2) 

The ratio of  to  = ☐

3) 

The ratio of  to  = ☐

4) 

The ratio of  to  = ☐

5) 

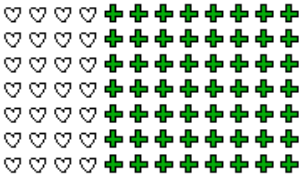
The ratio of  to  = ☐

Printable Math Worksheets @ www.mathworksheets4kids.com

Name : _____ Score : _____

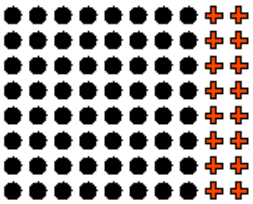
Teacher : _____ Date : _____

Find the Ratios



What is the ratio of ♡ to ✚ ? = ___ : ___ = ___ : ___ Simplified

What is the ratio of ✚ to (♡ + ✚) ? = ___ : ___ = ___ : ___



What is the ratio of ● to ✚ ? = ___ : ___ = ___ : ___ Simplified

What is the ratio of ✚ to (● + ✚) ? = ___ : ___ = ___ : ___

What is the ratio of ◆ to ▲ ? = ___ : ___ = ___ : ___ Simplified

What is the ratio of ▲ to (◆ + ▲) ? = ___ : ___ = ___ : ___

What is the ratio of ✚ to ● ? = ___ : ___ = ___ : ___ Simplified

What is the ratio of ● to (✚ + ●) ? = ___ : ___ = ___ : ___