Warm Up Grade 8

April 10, 2019

Tuesday April 16, TEST on Chapter 5

1) In two separate pickle recipes the ratio of Sugar to Vinegar is different? Explain how you know which is sweeter? MUST show math

Recipe A calls for 6 cups of sugar for every 4 cups of vinegar

Recipe B calls for 4 cups of sugar for every 3 cups of vinegar

A) S : V
6 : 4 ×3
18 : 12 ×3
↓ more sugar
Sweeter

B) S : V
4 : 3 ×4
16 : 12 ×4

2) Complete the chart

D → % ×100
% → D ÷100
F → D · Top ÷ Bott
D → F place value

Fraction	Decimal	Percent
$\frac{15}{21}$	0.71	71%
$\frac{8}{25} = \frac{16}{50} = \frac{32}{100}$	0.32	32%
$\frac{6}{25} = \frac{24}{100}$	0.24	24%
$\frac{117}{1000}$	0.117	11.7%
$\frac{6}{5} = \frac{12}{10}$	1.2 (tenths)	120%

11

5) If 55% of the regular price is $19.25, what is the regular price?

6) Write 3 equivalent ratios to 75: 5

Find the missing variable:

may need to reduce before you start

a) 18 : x = 27 : 12

÷3 Reduce ÷3

x3 x4

9 : 4

x = 8

b) 63 : 36 = 21 : n

÷9 ÷9

7 : 4

x3 x3

n = 12

c) 24 : 20 = 30: y

÷4 ÷4

x5

6 : 5 = 30 : y

x5

y = 25

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10. Alison

6 of 13 shots

×9 ×9

54 of 117

$\frac{6}{13} = 0.46$

or 46% of shots

Nadhu

5 of 9 shots

×13 ×13

65 of 117

$\frac{5}{9} = 0.555...$

or 56% of shots

Nadhu played better.

11. Calgary

2 pizza for 3 people

÷3 ÷3

$\frac{2}{3}$ pizza / person

0.666...

Alberta

3 pizzas for 5 people

÷5 ÷5

$\frac{3}{5}$ / person

$\frac{6}{10}$ or 0.6

The Calgary team received more pizza per person

(b) Yes, you could find what percent of a pizza each person received.

12. Recipe A
vinegar : oil
150 : 250
450 : 750

Recipe B
vinegar : oil
225 : 400
450 : 800

A 3:5 → 41:80
B 9:16 → 45:80
OR
5:25
3:5
9:16
16

less oil than B so stronger vinegar

Recipe A has a stronger vinegar taste, they both have 450ml of vinegar, but A has less oil.

13. Ms Arbuckle
Fiction : Non Fiction
7 : 5
42 : 30
Fiction

Mr. Albright
Fiction : Non Fict.
4 : 3
40 : 30
Fiction

b) Ms Arbuckle

$\frac{30}{72} = 0.42$ or 42%

Mr. Albright

$\frac{30}{70} = 0.43$ or 43%

14. A conc : water
2 : 1

B conc : water
3 : 2

b) A 6 : 3 6 : 4

then add one can of water to A to make the conc : water the same.

15. a)

	red : yellow
A	4 : 12
B	3 : 15
C	2 : 3

b)

	red : yellow
A	1 : 3
B	1 : 5
C	1 : 1.5

c) Shade C will have the most red

d) Shade B will have the most yellow.

16. Cage A

White : Brown
5 : 6

Cage B

White : Brown
7 : 5

Marcel says B has more brown,
$\frac{5}{11} > \frac{1}{2}$ and $\frac{5}{10} < \frac{1}{2}$

He is correct, he compared brown to all.

17. Glider A

14 : 3
56 : 12

Glider B

15 : 4
45 : 12

Glider A will move forward 56 m for every 12 m of altitude lost

Glider B will move forward 45 m for every 12 m of altitude lost.

Glider A will cover the most horizontal distance.

18. One box

Hockey : Basketball : All

4 : 3 : 7

20 : 15 : 35

2nd box

H : B : All

3 : 2 : 5

21 : 14 : 35

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4. (a) t : 18 = 6 : 3

36 : 18 ×6 ×6

t = 36

(b) v : 60 = 3 : 10

18 : 60 = 3 : 10 ×6 ×6

v = 18

(c) x : 15 = 2 : 3

10 : 15 = 2 : 3 ×5 ×5

x = 10

(d) s : 28 = 9 : 4

63 : 28 = 9 : 4 ×7 ×7

s = 63

(e) 6 : c = 2 : 11

6 : 33 = 2 : 11 ×3 ×3

c = 33

(f) 39 : b = 3 : 2

39 : 26 = 3 : 2 ×13 ×13

b = 26

5. (a) 5 : t = 15 : 36

5 : 12 = 15 : 36

t = 12

(b) 45 : 72 = 5 : n

45 : 72 = 5 : 8

n = 8

(c) 120 : 70 = 12 : k

120 : 70 = 12 : 7

k = 7

(d) 81 : 27 = 9 : m

81 : 27 = 9 : 3

m = 3

(e) 27 : 63 = p : 7

27 : 63 = 3 : 7

p = 3

(f) 8 : s = 64 : 80

8 : 10 = 64 : 80

s = 10

6. (a) 1 : 6 = a : 54

1 : 6 = 9 : 54

a = 9

(b) 3 : 8 = e : 40

3 : 8 = ___ : 40

e = 15

(c) 2 : 15 = f : 75

2 : 15 = ___ : 75

f = 10

(d) 42 : 36 = g : 6

42 : 36 = ___ : 6

g = 7

(e) 3 : 7 = 30 : p

3 : 7 = 30 : ___

p = 70

(f) 26 : 65 = 2 : r

26 : 65 = 2 : ___

r = 5

7. (a) 18 : a = 14 : 21

18 : ___ = 2 : 3

a = 27

(b) 35 : b = 15 : 12

35 : ___ = 5 : 4

b = 28

(c) m : 18 = 18 : 27

___ : 18 = 6 : 9

m = 12

(d) 88 : 33 = h : 6

8 : 3 = ___ : 6

h = 16

(e) 6 : 8 = j : 44

3 : 4 = ___ : 44

j = 33

(f) 15 : 42 = 20 : w

60 : 168 = 20 : w

÷3 ÷3

w = 56

15 : 42 = 20 : w

5 : 14 = 20 : ___

×4 ×4

w = 56

Warm Up Grade 8

Apr. ___,2019

1) The recommended seeding on a package of grass seed is 200 g per 9 m^2. Carey spread 150 g over 6.5 m^2.
Is this more than, equal to, or less than the recommended seeding? How do you know? (Make a term 1)

Recommended
Seeds : Area
200g : $9m^2$
x3
600g : $27m^2$
Big area spread out
Same amount of seed

Carey
Seeds : Area
150g : $6.5m^2$
x4 x4
600g : $26m^2$
more seed

S : A
200g : $9m^2$ ÷9 ÷9
22.2g : 1

S : A
150g : $6.5m^2$ ÷6.5 ÷6.5
23.07g : 1
more seeds

2) A contractor brought 2 shades of yellow paint for his clients to see. Shade 1 is made by mixing 5 cans of yellow paint with 3 cans of white paint. Shade 2 is made by mixing 7 cans of yellow paint with 4 cans of white paint. The clients want the lighter shade. Which shade should they choose?

Shade 1
y : w
x7 5 : 3 x7
35 : 21
more white
make it lighter
Shade 1 is lighter

Shade 2
y : w
x5 7 : 4 x5
35 : 20

Term 1 the same

Solving Ratio Problems

Have students work on Investigate pg. 287

Recipe for Apple pie that serves 6 people.

500 ml flour

200 ml of margarine

500 g sliced apples

125 g sugar.

Toby only has 350 g of sliced apples.

How much of each of the ingredients does Toby need to make the pie?

How many people will Toby's pie serve?

Solving Ratio Problems

Have students work on Investigate pg. 287

Recipe for Apple pie that serves 6 people.

	÷10	×7
500 ml flour	50 ml	350 ml
200 ml of margarine	20 ml	140 ml
500 g sliced apples	50 g	350 g
125 g sugar.	12.5 g	87.5 g

Toby only has 350 g of sliced apples.

How much of each of the ingredients does Toby need to make the pie?

How many people will Toby's pie serve?

$$\frac{7}{10} = \frac{35}{50} = \frac{350}{500}$$

ONLY MAKES 70% OF BATCH

70% OF 6 = 4.2

When given a question to find the missing variable in a ratio:

- First see if you can multiply or divide to get a term in the second ratio.
- Reduce the given ratio, if possible, then recheck to see if you can multiply or divide.
- Finally, make the same term in each ratio equal to solve for the missing term.

Examples

a) 3 : 8 = __ : 24

b) 15 : 40 = _p_ : 48

c) 4 : 9 = _v_ : 10

c)

hint can you make the second term the same??

Class/Homework

Tuesday April 16

1 acegi
#3
#4
#7

Worksheet 8 - Solving Ratios

Part 1) 10 MC

Part 2) 9 short response

#1) Find the missing number in each equivalent ratio ex) 25 : 5 = __ : 7

#2) Find the % of a number Ex) Find 200 % of 240 b) Find 0.5% of 240

#3) Discount, Sales Price, tax, cost with tax

ex) The cost of a a bike is $550. Next week it is going on sale for 25% off. The sales tax is 15% here in NB. a) Calculate the discount and the sales price. B) Calculate the tax and the total cost with tax.

#4) Kevin has saved 82% of the regular price of his shirt which is $74.62. How much more does he have to save to get to the regular price. (Hint : this is a 2 step question)

#5) Compare ratios

#6) Given a picture of shapes write the ratios indicated

#7) Comparing ratios and determine who has done better within a game

8) Express as a unit rate (Second term must be 1) Ex) Earn $90 in 3 hours then $30 in 1 Hour

#9) a)Given 3 options to buy, which is the better deal

b) If yoiu need a certain amout which is the best option (Explain)

Attachments

Extra Practice 8 Solving Ratios.pdf