

48 School days until...



Warm Up Grade 8

April. 8, 2019



time is ticking

Apr. 17
Test

Fraction
Decimal
percent
Ratio

1) Complete the chart

Fraction	Decimal	Percent
$\frac{8}{11}$	$0.\overline{72}$	72%
$\frac{15}{7}$	2.14	214%
$\frac{789}{1000}$	0.789	78.9%
$\frac{56}{1000} = \frac{28}{500} = \frac{14}{250}$	0.056	5.6%
$\frac{2}{1000} = \frac{1}{500}$	0.002	0.2%

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

$$55\% \times R = 19.25$$

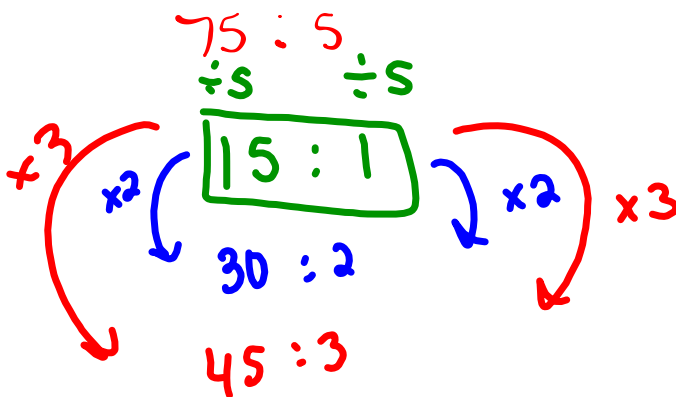
$$\downarrow$$

$$0.55 R = 19.25$$

$$\frac{0.55 R}{0.55} = \frac{19.25}{0.55}$$

$$R = 35$$

3) Write 3 equivalent ratios to 75:5



F \rightarrow D Top \div Bott on cal

D \rightarrow % \times 100

% \rightarrow D \div by 100

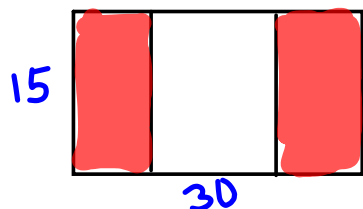
D \rightarrow Fr place values

12. non fiction : fiction
3 : 1
300 : 100
1500 : 500

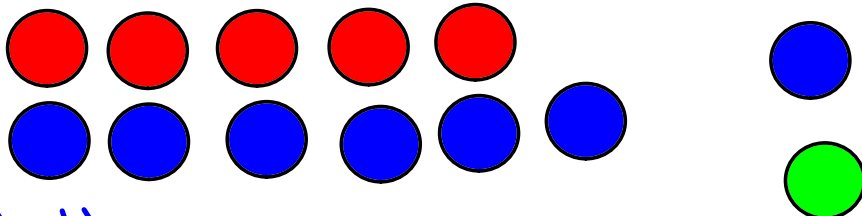
b) There are numerous answers,
depending on the size of the library.

13. Length: width
 $\frac{2}{20} : \frac{1}{10}$
 $30 : 15$

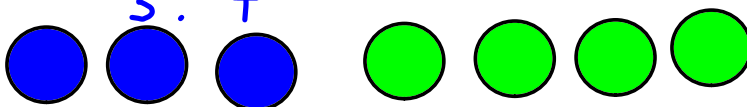
- largest from the sheet of paper



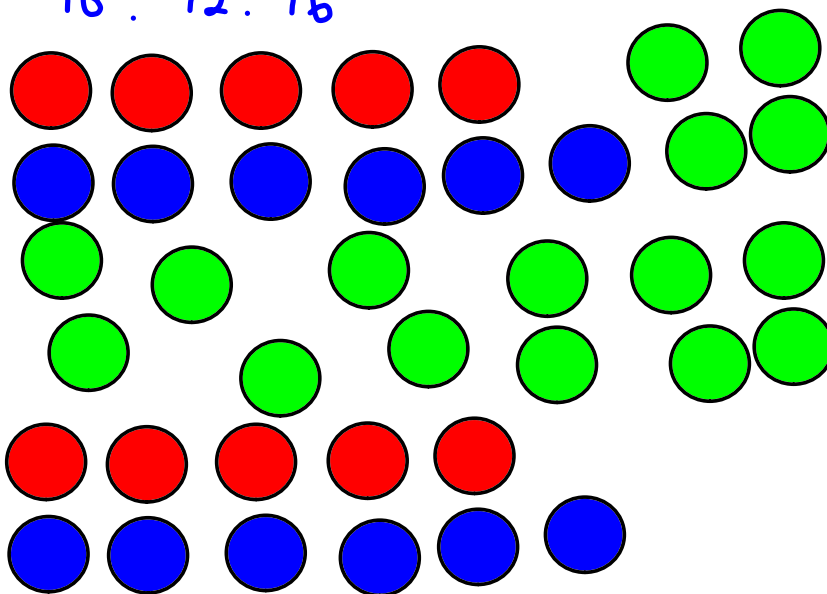
14. red : blue
 $5 : 6$



b) blue : green
 $3 : 4$



c) red : blue : green
 $10 : 12 : 16$



(b) $\frac{10}{10} : \frac{12}{12} : \frac{16}{16}$
 satisfies all 3.

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To see if the ratios are equivalent, reduce or find equivalent ratios with the same terms.

$$15. a) 16:30 \quad \text{and} \quad 28:42$$

$$8:15$$

$$14:21$$

$$2:3$$

$$8:12$$

They are not equivalent

$$b) 27:63$$

$$49:21$$

Not equivalent, in first ratio the first term is smaller, but in the second ratio, the first term is larger

$$c) 56:104:88$$

$$42:78:66$$

$$28:52:44$$

$$7:13:11$$

$$14:26:22$$

$$7:13:11$$

They are equivalent

$$d) 20:70:50$$

$$30:105:75$$

$$2:7:5$$

$$\div 15$$

$$2:7:5$$

They are equivalent.

$$16. \text{ girls: boys}$$

$$5:3$$

$$\text{student}$$

$$8$$

$$32$$

$$\text{students}$$

$$10:6$$

$$16$$

$$15:9$$

$$24$$

$$20:12$$

$$32 \leftarrow$$

There are 12 boys and 20 girls in the class.

$$17. \quad a) \quad 10:35 = \underline{\quad}:42$$

$$2:7 = \underline{12}:42$$

$$b) \quad \begin{array}{c} 36:78 = \underline{\quad}:182 \\ \div 6 \quad \div 6 \end{array}$$

$$6:13 = \underline{84}:182$$

$\times 14$

$$c) \quad \underline{\quad}:15 = 68:85$$

$$d) \quad 49:\underline{\quad}:63 = 84:36:108$$

$\div 12 \quad \div 12$

$$49:\underline{21}:63 = 7:3:9$$

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1. No, because there are 365 days in a year and 400 students so there can not be 2 students with the same b-day every day

$$365 + 365 = 730$$

and there may be some days with more than 2 birthdays

2.

Eggs: sugar: milk: vanilla
 6 : 1 : 750 : 5

$$2 : \frac{1}{3} : 250 : \frac{5}{3}$$

$$4 : \frac{2}{3} : 500 : \frac{10}{3}$$

3. \$3.99 for dozen or 35¢ each

35 for 1

70¢ for 2

420¢ for 12

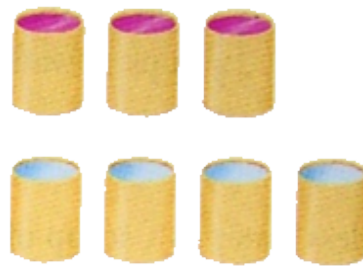
\$3.99 for a dozen is a better deal.

Comparing Rates

Recipe A for punch calls for 2 cans of concentrate and 3 cans of water.



Recipe B for punch calls for 3 cans of concentrate and 4 cans of water.



In which recipe is the punch stronger?
Or, are the drinks the same strength?
Explain how you know.

A
Juice : Water
2 : 3
x3 → 6 : 9
↓
more water makes it weaker

J : W
2 : 3
÷2 → 1 : 1.5

B
Juice : Water
3 : 4
x2 → 6 : 8
Stronger

J : W
3 : 4
÷3 → 1 : 1.33



You can compare ratios either by:

- getting equivalent ratios with one of the terms the same in both ratios
- changing each ratio so that the **second term is 1**

Erica makes her coffee with 2 scoops of coffee and 5 cups of water.

Jim makes his coffee with 3 scoops of coffee and 7 cups of water.

Whose coffee is stronger?



No coffee, No workee.



Erica Coffee: Water

$$\begin{matrix} \text{x3} \curvearrowright & 2 & : & 5 \\ & 6 & : & 15 \end{matrix} \curvearrowleft \text{x3}$$

↓
more water
so weaker

Jim Coffee: Water

$$\begin{matrix} \text{x2} \curvearrowright & 3 & : & 7 \\ & 6 & : & 14 \end{matrix} \curvearrowleft \text{x2}$$

Stronger

Or

$$14 : 35$$

$$15 : 35$$



Jim's coffee is stronger

You can compare ratios either by:

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- changing each ratio so that the second term is 1

4a) $3:12$ \rightarrow $1:4$

Handwritten notes: \downarrow term 1 (pointing to 3), \downarrow term 2 (pointing to 12), $\div 3$ (under 12), $\div 3$ (under 12), $\div 3$ (under 12).

Class/Homework

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- # 4(a,d,f),
- #5(a,d,f),
- #6,
- #7,
- #8,
- #9