

56 School days until...



Warm Up Grade 8

March 28, 2017



time is ticking

1) Complete the chart

Fraction	Decimal	Percent
$\frac{8}{11}$	$0.\overline{72}$	$\approx 72\%$
$\frac{15}{7}$	2.14	214%
$\frac{789}{1000} =$	0.789	78.9%
$\frac{56}{1000} = \frac{7}{125}$	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?

$$55\% \text{ of } R = \$19.25$$

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

$$R = \$35$$

Regular Price is \$35

3) Write 3 equivalent ratios to 75:5

75 : 5 $\div 5$

15 : 1 ✓

30 : 2 ✓

45 : 3 ✓

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

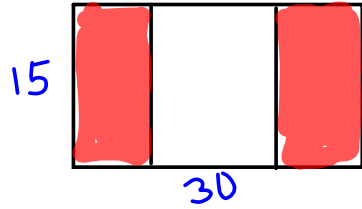
3 out of 4 books
NF : F : T
3 1 4

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

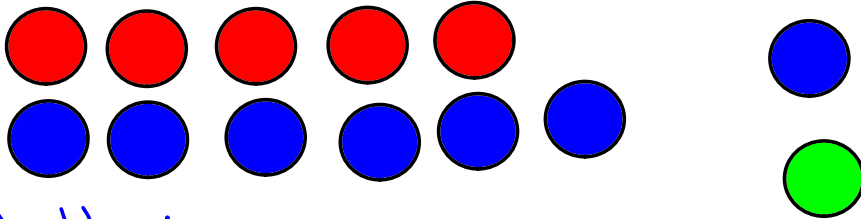
13. Length: width
 $\frac{2}{20} : \frac{1}{10}$
 $30 : 15$

$\frac{2}{30} : \frac{1}{15}$
 $\frac{2}{40} : \frac{1}{20}$
 too Big

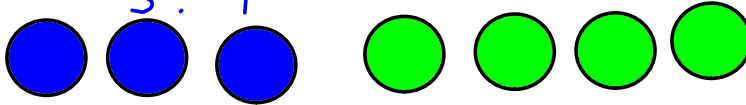
- largest from the sheet of paper



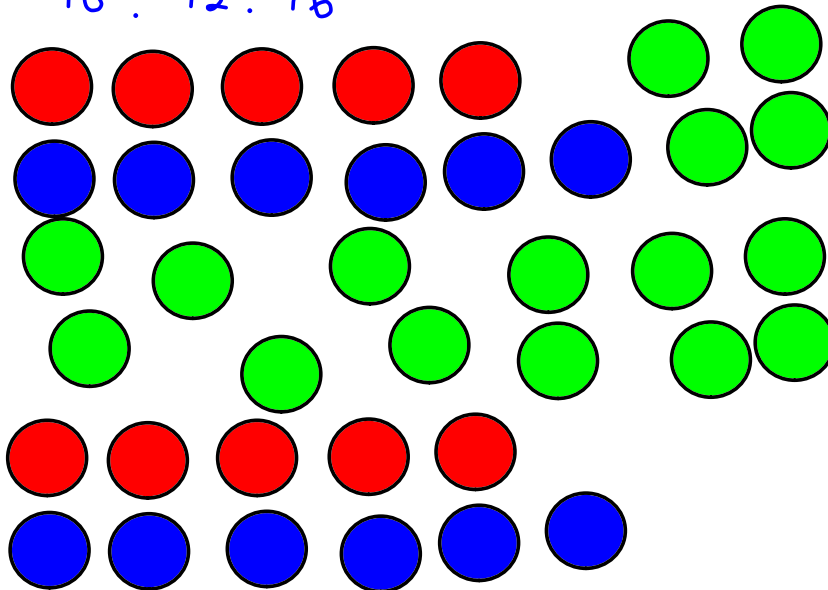
14. red : blue
 $5 : 6$



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.

pg 275

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

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

$$8:15 \quad \quad \quad 14:21$$

$$\quad \quad \quad \quad \quad 2:3$$

$$\quad \quad \quad \quad \quad 8:12$$

They are not equivalent

$$b) 27:63 \quad \quad \quad 49:21$$

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

$$c) 56:104:88 \quad \quad \quad 42:78:66$$

$$28:52:44 \quad \quad \quad 7:13:11$$

$$14:26:22$$

$$7:13:11$$

They are equivalent

$$d) 20:70:50 \quad \quad \quad 30:105:75$$

$$2:7:5 \quad \quad \quad \begin{matrix} \cdot 15 \\ 2:7:5 \end{matrix}$$

They are equivalent.

$$16. \begin{array}{l} \text{girls} : \text{boys} \\ 5 : 3 \\ \times 4 \left(\begin{array}{l} 10 : 6 \\ 15 : 9 \\ 20 : 12 \end{array} \right. \end{array} \quad \begin{array}{l} \text{student} \\ 8 \\ \left. \begin{array}{l} 16 \\ 24 \\ 32 \end{array} \right) \times 4 \end{array}$$

32 students

There are 12 boys and 20 girls in the class.

17. a) $10 : 35 = \underline{\quad} : 42$
 $\div 5 \quad \div 5$
 $2 : 7 = \underline{12} : 42$
 $\times 6$

b) $36 : 78 = \underline{\quad} : 182$
 $\div 6 \quad \div 6$
 $6 : 13 = \underline{84} : 182$
 $\times 14 \quad \times 14$

c) $\frac{12}{4} : 15 = 68 : 85$
 $\times 3 \quad 4 : 5$

d) $49 : \underline{\quad} : 63 = 84 : 36 : 108$
 $\div 12 \quad \div 12$
 $49 : \underline{21} : 63 = 7 : 3 : 9$
 $\times 7$

pg 277.

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

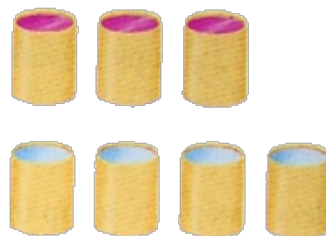
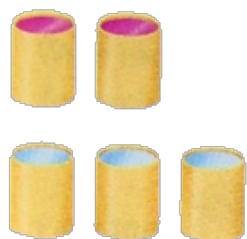
420¢ for 12

\$3.99 for a dozen is a better deal.

Comparing Ratios
Ratios

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.

RA Juice: Water
2 : 3
x3
1st term are the same
(comparing term must be the same)
6 : 9

RB Juice: Water
3 : 4
x2
6 : 8

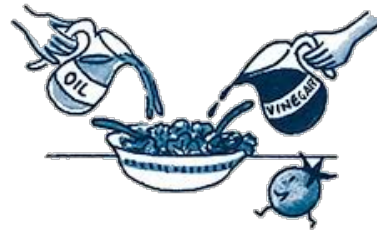
Less water we have when Juice amount is the same then the stronger the punch

Rec. B Stronger

OR

J: W
2 : 3
2nd term same in both
8 : 12

J: W
3 : 4
9 : 12
↑
more Juice the stronger your punch



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

$$2 : 5$$

Make 1st term the same

$$6 : 15$$

↑ more water
so weaker

Jim Coffee: Water

$$3 : 7$$

$$6 : 14$$

↑ so less water
so stronger

Or



E C:W

$$\begin{array}{l} 2 : 5 \\ \div 5 \quad \downarrow \div 5 \\ 0.4 : 1 \\ \uparrow \\ \text{less coffee} \\ \text{(less strong)} \end{array}$$

J C:W

$$\begin{array}{l} 3 : 7 \\ \div 7 \quad \downarrow \div 7 \\ 0.43 : 1 \\ \uparrow \\ \text{more coffee} \\ \text{more strong} \end{array}$$

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

Class/Homework

→ Term 1 has to be 1

pg.284

4(a,d,f),

#5(a,d,f),

#6,

#7,

#8,

#9

4b) Term 1 : Term 2

$$\Rightarrow \left(\begin{array}{c} 5 : 40 \\ 1 : \underline{8} \end{array} \right) \div 5$$

5) Term 1 : Term 2

$$\Rightarrow \left(\begin{array}{c} 55 : 11 \\ \underline{5} : 1 \end{array} \right) \div 11$$