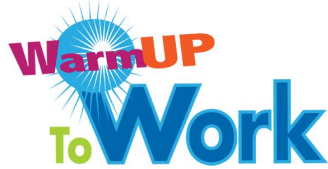


Feb. 17, 2016  
 Tuesday



Grade 8

1) Gail just received her pay of \$1800. She pays one-ninth to the hydro company and two-fifths for rent.

a) How much does she pay to the hydro?

$$\begin{aligned} & \frac{1}{9} \text{ of Pay} \\ & \frac{1}{9} \times \frac{1800}{1} \\ & = \frac{1800}{9} \\ & = 200 \end{aligned}$$

\$ 200 goes to hydro

b) How much does she have left of her pay after the bills are paid?

$$\begin{aligned} \text{Rent} \quad & \frac{2}{5} \text{ of Pay} \\ & \frac{2}{5} \times \frac{1800}{1} \\ & = \frac{3600}{5} \\ & = \$ 720 \end{aligned}$$

Rent 720  
 hydro 200

$$\begin{aligned} \text{Total Bills} &= \text{hydro} + \text{Rent} \\ &= 200 + 720 \\ &= \$ 920 \end{aligned}$$

$$\begin{aligned} \text{Left} &= \text{Pay} - \text{Bills} \\ &= 1800 - 920 \\ &= \$ 880 \end{aligned}$$

pg 151

Homework  
Solutions

3 a)  $\frac{2}{3} + \frac{1}{4}$   
 $\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$   
 cups of liquid

b)  $\frac{1}{3}$  of 165

$\frac{1}{3} \times 165 = \frac{165}{3} = 55$

$\frac{1}{3}$  of 150 = 50

$\frac{1}{3}$  of 15 = 5

55 silver caps

c)  $\frac{3}{4} - \frac{3}{8}$   
 $\frac{6}{8} - \frac{3}{8} = \frac{3}{8}$   
 She need  $\frac{3}{8}$  more

d)  $\frac{5}{12} \times 2 = \frac{10}{12}$  was shared

4  $\frac{2}{3} + \frac{1}{4}$   
 $\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$

He had  $\frac{11}{12}$  cans of paint.

5.  $5 \div \frac{1}{8}$   
 $5 \times \frac{8}{1} = 40$

The team scored 40 goals.

$\frac{1}{8}$  of Total = 5  
 $\frac{1}{8} \times \text{Total} = 5$

$\frac{1}{8}$  is 5  
 so  $\frac{8}{8} = 8 \times 5$   
 = 40

6. morning + afternoon

$\frac{1}{6} + \frac{1}{3}$

$\frac{1}{6} + \frac{2}{6} = \frac{3}{6}$  or  $\frac{1}{2}$

$\frac{1}{2}$  attended in the evening

b)  $\frac{1}{2}$  of 30

$\frac{1}{2} \times 30 = \frac{30}{2}$

= 15 parents attended in the evening

7.  $\frac{3}{4} - \frac{1}{6}$

$\frac{9}{12} - \frac{2}{12} = \frac{7}{12}$

Her lunch was  $\frac{7}{12}$  of an hour.

Homework  
Solutions

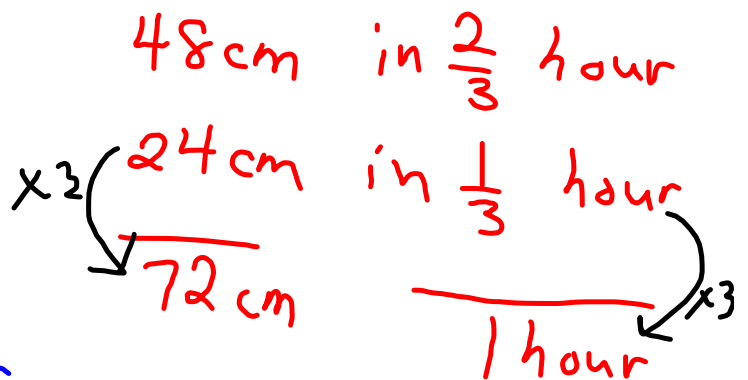
8.  $\frac{2}{5}$  of 2400

$\frac{2}{5} \times 2400 = \frac{4800}{5}$   
 $= 960$

\$960 is paid for rent

9.  $48 \div \frac{2}{3}$

$48 \times \frac{3}{2} = \frac{144}{2}$   
 $= 72 \text{ cm}$   
in one hour



10

$$\frac{1}{6} + \frac{1}{4} + \frac{3}{8}$$

$$\frac{4}{24} + \frac{6}{24} + \frac{9}{24} = \frac{19}{24}$$

Rock  $\frac{24}{24} - \frac{19}{24} = \frac{5}{24}$

fraction of Rock

Homework

Solutions

11.  $\frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{5}{6}$

$2 \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + 1 = 2 \frac{1}{2}$

not much remains, maybe  $\frac{1}{4}$

b)  $\frac{3}{8} \times 3 = \frac{9}{8}$  or  $1 \frac{1}{8}$

c)  $\frac{9}{8} + \frac{5}{6}$

$$\frac{27}{24} + \frac{20}{24} = \frac{47}{24} = 1 \frac{23}{24}$$

d)  $2 \frac{1}{2} - \frac{47}{24}$

$$\begin{array}{r} 2 \frac{1}{2} \\ - \frac{47}{24} \\ \hline 2 \frac{12}{24} \\ - \frac{47}{24} \\ \hline 2 \frac{60}{24} \\ - \frac{47}{24} \\ \hline 2 \frac{13}{24} \end{array}$$

a little over  $\frac{1}{2}$  cup

pg 152

Homework

Solutions

12.  $\frac{1}{4}$  of  $\frac{1}{3}$

$$\frac{1}{4} \times \frac{1}{3} = \frac{1}{12}$$

They  $\frac{1}{12}$  on the first day

13.  $\frac{4}{5}$  of the bottle was left

$$\frac{3}{4} \times \frac{4}{5} = \frac{12}{20} \text{ or } \frac{3}{5}$$

The calf had  $\frac{3}{5}$  of the bottle.

14.  $2\frac{5}{6} \div 4$

$$\frac{17}{6} \times \frac{1}{4} = \frac{17}{24}$$

loaves for each type  
of sandwich.

**Order of Operations with Fractions**

**B E D M A S**

B - Brackets

E - Exponents

DM - Multiplication and Division in the order they occur

AS - Addition and Subtraction in the order they occur common denominators

Examples:

$$\begin{aligned}
 & \text{(a) } \frac{5}{16} - \frac{3}{8} \times \frac{2}{3} \\
 & = \frac{5}{16} - \frac{6}{24} \quad \text{Reduce} \\
 & = \frac{5}{16} - \frac{1}{4} \\
 & \quad \text{C.D.} \\
 & = \frac{5}{16} - \frac{4}{16} \\
 & = \frac{1}{16}
 \end{aligned}$$

$$\begin{aligned}
 & \text{(b) } \frac{3}{4} - \frac{2}{3} \div \frac{4}{5} \times \left( \frac{1}{8} + \frac{1}{8} \right) \\
 & = \frac{3}{4} - \frac{2}{3} \div \frac{4}{5} \times \frac{2}{8} \\
 & = \frac{3}{4} - \frac{2}{3} \div \frac{4}{5} \times \frac{3}{8} \\
 & \quad \text{Flip and} \\
 & = \frac{3}{4} - \frac{2}{3} \times \frac{5}{4} \times \frac{3}{8} \\
 & = \frac{3}{4} - \frac{10}{12} \times \frac{3}{8} \quad \text{Reduce} \\
 & = \frac{3}{4} - \frac{5}{6} \times \frac{3}{8} \\
 & = \frac{3}{4} - \frac{15}{48} \quad \text{Reduce} \\
 & = \frac{3}{4} - \frac{5}{16} \\
 & \quad \text{Need CA.} \\
 & = \frac{12}{16} - \frac{5}{16} \\
 & = \frac{7}{16}
 \end{aligned}$$

Order of Operations with Fractions

B - Brackets

E - Exponents

DM - Multiplication and Division in the order they occur

AS - Addition and Subtraction in the order they occur common denominators

Examples:

(a)  $\frac{5}{16} - \frac{3}{8} \times \frac{2}{3}$

$$\begin{aligned} &\frac{5}{16} - \frac{6}{24} \\ &\frac{5}{16} - \frac{1}{4} \\ &\frac{5}{16} - \frac{4}{16} \\ &\frac{1}{16} \end{aligned}$$

(b)  $\frac{3}{4} - \frac{2}{3} \div \frac{4}{5} \times (\frac{1}{8} + \frac{1}{4})$

$$\begin{aligned} &\frac{3}{4} - \frac{2}{3} \div \frac{4}{5} \times (\frac{1}{8} + \frac{2}{8}) \\ &\frac{3}{4} - \frac{2}{3} \times \frac{5}{4} \times \frac{3}{8} \\ &\frac{3}{4} - \frac{10}{12} \times \frac{3}{8} \\ &\frac{3}{4} - \frac{30}{96} \quad \text{or} \quad \frac{3}{4} - \frac{5}{16} \\ &\frac{72}{96} - \frac{30}{96} \quad \frac{12}{16} - \frac{5}{16} \\ &\frac{42}{96} = \frac{7}{16} \quad \frac{7}{16} \end{aligned}$$

# Class/Homework

Test FRIDAY, Feb. 19

pg. 155 #4(do it out as well), #5 to #6 (Show Work)





pg 155

$$4 \text{ a) } \frac{1}{3} \times \left( \frac{7}{8} - \frac{3}{4} \right)$$

$$\frac{1}{3} \times \left( \frac{7}{8} - \frac{6}{8} \right)$$

$$\frac{1}{3} \times \frac{1}{8} = \frac{1}{24}$$

$$b) \frac{7}{8} \div \left( \frac{1}{3} \times \frac{1}{8} \right)$$

$$\frac{7}{8} \div \frac{1}{24}$$

$$\frac{7}{8} \times \frac{24}{1} = 21$$



$$c) \frac{5}{9} \times \left( \frac{3}{5} \div \frac{1}{6} \right)$$

$$\frac{5}{9} \times \left( \frac{3}{5} \times \frac{6}{1} \right)$$

$$\frac{5}{9} \times \frac{18}{5} = \frac{270}{45}$$

$$= 6$$

$$d) \left( \frac{5}{3} + \frac{7}{12} \right) \times \frac{4}{9}$$

$$\left( \frac{20}{12} + \frac{7}{12} \right) \times \frac{4}{9}$$

$$\frac{27}{12} \times \frac{4}{9} = \frac{108}{108} = 1$$

(or  $\frac{108}{108} = 1$ )

$$5. \frac{5}{10} + \frac{2}{3} \times \frac{1}{2}$$

$$\frac{5}{10} + \frac{2}{6}$$

$$\frac{5}{10} + \frac{2}{6} = \frac{16}{30}$$

Raj was correct.

$$\begin{aligned}
 a) \quad & \frac{1}{2} \times \frac{3}{5} + \frac{1}{4} \\
 & \frac{3}{10} + \frac{1}{4} \\
 & \frac{6}{20} + \frac{5}{20} = \frac{11}{20}
 \end{aligned}$$

$$\begin{aligned}
 b) \quad & \frac{2}{3} + \frac{5}{6} \div \frac{1}{2} \\
 & \frac{2}{3} + \frac{5}{6} \times \frac{2}{1} \\
 & \frac{2}{3} + \frac{10}{6} \\
 & \frac{4}{6} + \frac{10}{6} = \frac{14}{6} \text{ or } \frac{7}{3}
 \end{aligned}$$

$$\begin{aligned}
 c) \quad & \frac{4}{5} \div \frac{7}{10} + \frac{1}{3} \\
 & \frac{4}{5} \times \frac{10}{7} + \frac{1}{3} \\
 & \frac{40}{35} + \frac{1}{3} \\
 & \frac{24}{21} + \frac{7}{21} = \frac{31}{21}
 \end{aligned}$$

$$\begin{aligned}
 d) \quad & \frac{1}{4} \times \left( \frac{11}{12} - \frac{5}{6} \right) \\
 & \frac{1}{4} \times \left( \frac{11}{12} - \frac{10}{12} \right) \\
 & \frac{1}{4} \times \frac{1}{12} = \frac{1}{48}
 \end{aligned}$$

$$\begin{aligned}
 e) \quad & \frac{1}{2} \times \left( \frac{4}{5} \div \frac{3}{10} \right) \\
 & \frac{1}{2} \times \left( \frac{4}{5} \times \frac{10}{3} \right) \\
 & \frac{1}{2} \times \frac{40}{3} = \frac{40}{30} \\
 & = \frac{4}{3}
 \end{aligned}$$

$$\begin{aligned}
 f) \quad & \left( \frac{3}{5} + \frac{7}{15} \right) \times \frac{5}{6} \\
 & \left( \frac{9}{15} + \frac{7}{15} \right) \times \frac{5}{6} \\
 & \frac{16}{15} \times \frac{5}{6} = \frac{80}{90} \\
 & = \frac{8}{9}
 \end{aligned}$$

Discuss pages 156-157 Checking and Reflecting

Chris's sister used  
 $\frac{1}{4}$  of stamps left on roll  
 $\frac{1}{4} \times \frac{1}{3} = \frac{1}{12}$

Stamps used

$$\frac{1}{12} + \frac{2}{3}$$

$$\frac{1}{12} + \frac{8}{12} = \frac{9}{12} = \frac{3}{4}$$

Stamps left

$$1 - \frac{3}{4} = \frac{1}{4} \text{ of stamps left}$$