

The Primary Stage of Grades (4-5)

Second Semester 2022 - 2023

Name: Answer Key

Subject: Mathematics

Date: / /

Revision Worksheet (2)

Class: Grade 5 (C,D,E,F&G)

**Objectives**

To review all taken concepts about fractions.

1) Fill in the missing numbers to make the following statements true (show your work).

a)  $\frac{5}{9} = \frac{\quad}{63}$

Handwritten work:  $5 \times 7 = 35$  (top arrow),  $9 \times 7 = 63$  (bottom arrow). The answer 63 is boxed.

b)  $\frac{7}{10} = \frac{77}{\quad}$

Handwritten work:  $7 \times 11 = 77$  (top arrow),  $10 \times 11 = 110$  (bottom arrow). The answer 110 is boxed.

c)  $\frac{8}{17} = \frac{\quad}{68}$

Handwritten work:  $8 \times 4 = 32$  (top arrow),  $17 \times 4 = 68$  (bottom arrow). The answer 68 is boxed.

d)  $\frac{24}{36} = \frac{4}{\quad}$

Handwritten work:  $24 \div 6 = 4$  (top arrow),  $36 \div 6 = 6$  (bottom arrow). The answer 6 is boxed.

e)  $\frac{12}{20} = \frac{\quad}{80}$

Handwritten work:  $12 \times 4 = 48$  (top arrow),  $20 \times 4 = 80$  (bottom arrow). The answer 80 is boxed.

f)  $\frac{75}{100} = \frac{3}{\quad}$

Handwritten work:  $75 \div 25 = 3$  (top arrow),  $100 \div 25 = 4$  (bottom arrow). The answer 4 is boxed.

2) Find the answer for each number sentence below in the simplest form:

a)  $4\frac{3 \times 4}{7 \times 4} + 5\frac{1 \times 7}{4 \times 7}$

$$\downarrow$$

$$4\frac{12}{28} + 5\frac{7}{28}$$

$$\boxed{9\frac{19}{28}}$$

b)  $8\frac{4}{9} - 2\frac{1 \times 3}{3 \times 3}$

$$\downarrow$$

$$8\frac{4}{9} - 2\frac{3}{9}$$

$$\boxed{6\frac{1}{9}}$$

c)  $2\frac{3}{8} + \frac{25}{3} =$

$$\downarrow$$

$$2\frac{3 \times 3}{8 \times 3} + 8\frac{1 \times 8}{3 \times 8}$$

$$2\frac{9}{24} + 8\frac{8}{24} = \boxed{10\frac{17}{24}}$$

d) 60 % of 250 =

$$\downarrow \quad \downarrow$$

$$\frac{60}{100} \times 250 = 150$$

e)  $\frac{3}{8}$  of 64 =

$$\downarrow \quad \downarrow$$

$$\frac{3}{8} \times 64 = \frac{3 \times 64}{8}$$

$$= \frac{192}{8}$$

$$= 24$$

f) 14 % of 75 =

$$\downarrow \quad \downarrow$$

$$\frac{14}{100} \times 75 = \frac{14 \times 75}{100}$$

$$= \frac{1050}{100}$$

$$= 10.5$$

OR

$$\frac{3}{8} \times 64 = 3 \times 8 = 24$$

3) Change the following improper fractions into mixed numbers :

a)  $\frac{79}{6} = 13 \frac{1}{6}$

$$\begin{array}{r} 13 \\ 6 \overline{) 79} \\ \underline{6} \phantom{0} \\ 19 \\ \underline{18} \\ 01 \end{array}$$

b)  $\frac{37}{9} = 4 \frac{1}{9}$

$$\begin{array}{r} 04 \\ 9 \overline{) 37} \\ \underline{36} \\ 01 \end{array}$$

c)  $\frac{93}{7} = 13 \frac{2}{7}$

$$\begin{array}{r} 13 \\ 7 \overline{) 93} \\ \underline{7} \phantom{0} \\ 23 \\ \underline{21} \\ 02 \end{array}$$

d)  $\frac{113}{4} = 28 \frac{1}{4}$

$$\begin{array}{r} 28 \\ 4 \overline{) 113} \\ \underline{8} \phantom{0} \\ 33 \\ \underline{32} \\ 01 \end{array}$$

4) Change the following mixed numbers into improper fractions:

a)  $9 \frac{2}{5} = \frac{9 \times 5 + 2}{5} = \frac{47}{5}$

b)  $11 \frac{3}{4} = \frac{4 \times 11 + 3}{4} = \frac{47}{4}$

c)  $3 \frac{9}{25} = \frac{25 \times 3 + 9}{25} = \frac{84}{25}$

d)  $8 \frac{5}{7} = \frac{8 \times 7 + 5}{7} = \frac{61}{7}$

5) Write  $<$ ,  $>$  or  $=$  to make statements true :

a)  $\frac{3}{7} < \frac{11}{4}$   
 $\frac{11}{4} = 2\frac{3}{4}$

b)  $\frac{10}{21} < \frac{5 \times 3}{7 \times 3}$   
 $\frac{5 \times 3}{7 \times 3} = \frac{15}{21}$

c)  $\frac{12}{5} > \frac{12}{9}$

d)  $\frac{23}{7} > 3\frac{2}{9} \rightarrow \frac{2}{7} > \frac{2}{9}$   
 $\frac{23}{7} = 3\frac{2}{7}$

e)  $4\% < \frac{8 \times 5}{20 \times 5}$   
 $4\% = \frac{4}{100}$   
 $\frac{8 \times 5}{20 \times 5} = \frac{40}{100}$

f)  $0.6 > 9\%$   
 $0.6 = \frac{6 \times 10}{10 \times 10} = \frac{60}{100}$   
 $9\% = \frac{9}{100}$

6) Write the following fractions in the simplest form.

a)  $\frac{32 \div 8}{80 \div 8} = \frac{4 \div 2}{10 \div 2} = \frac{2}{5}$

b)  $\frac{35 \div 7}{63 \div 7} = \frac{5}{9}$

c)  $5 \frac{9 \div 3}{21 \div 3} = 5 \frac{3}{7}$

d)  $\frac{49}{8} = 6 \frac{1}{8}$

$$\begin{array}{r} 6 \\ 8 \overline{) 49} \\ \underline{48} \\ 01 \end{array}$$

7) Order the following fractions starting with the smallest :

a)  $\frac{1}{4}$  ,  $\frac{7}{12}$  ,  $\frac{4}{8}$  ,  $\frac{1}{3}$

more than  $\frac{1}{2}$

$\frac{1}{4} < \frac{1}{3} < \frac{1}{2} < \frac{7}{12}$

$\frac{3}{12}$     $\frac{4}{12}$     $\frac{6}{12}$     $\frac{7}{12}$

OR

$\frac{1 \times 4}{3 \times 4} = \frac{4}{12}$   
 $\frac{1 \times 6}{2 \times 6} = \frac{6}{12}$   
 $\frac{1 \times 3}{4 \times 3} = \frac{3}{12}$

b)  $\frac{11 \times 4}{25 \times 4}$  , 0.09 , 60% ,  $\frac{3 \times 25}{4 \times 25}$

$\frac{44}{100}$     $\frac{9}{100}$     $\frac{60}{100}$     $\frac{75}{100}$

0.09 <  $\frac{11}{25}$  < 60% <  $\frac{3}{4}$

8) Complete the following table :

Fraction	Decimal	Percentage
$\frac{7 \times 5}{20 \times 5} = \frac{35}{100}$	0.35	35%
$\frac{65}{100}$	0.65 →	65%
$\frac{15}{100}$	0.15	15% =
$\frac{5 \times 12.5}{8 \times 12.5} = \frac{62.5}{100}$	0.625	62.5%
$\frac{4}{100}$	0.04	4%
$\frac{9}{100}$	0.09	9%

OR use long division to write it in decimal.

0.625

$$\begin{array}{r} 8 \overline{) 50} \\ \underline{48} \\ 20 \\ \underline{16} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

9) Steven says, "I would rather have  $\frac{5}{9}$  of \$72 than  $\frac{4}{6}$  of \$66

because I will get more to spend." Is he correct?

(Please explain your answer) He is wrong

$$\begin{array}{r} \frac{5}{9} \text{ of } 72 \\ \downarrow \\ \frac{5}{9} \times 72 \\ \hline 5 \times 72 \\ 9 \\ \hline 360 \\ 9 \\ \hline \$40 \end{array} \quad \boxed{<} \quad \begin{array}{r} \frac{4}{6} \text{ of } 66 \\ \downarrow \\ \frac{4}{6} \times 66 \\ \hline 4 \times 66 \\ 6 \\ \hline 264 \\ 6 \\ \hline \$44 \end{array}$$

10) In 2 days of working, Jacob earned \$15 on Monday from selling recyclable bottles and \$27 from recyclable cans on Tuesday.

He put  $\frac{5}{6}$  of his earnings in his piggy bank and used the rest to buy a shirt.

How much money did he save?

$$\$15 + \$27 = \$42$$

$$\frac{5}{6} \times 42 = \frac{5 \times 42}{6} = \frac{210}{6} = \$35$$

$$\text{OR } \frac{5}{6} \times 42 = 5 \times 7 = 35$$

11) Dana has 75 sweets in a bag. She keeps  $\frac{2}{5}$  of them for herself and 20% of them to her sister and shares the rest with her friends.

a) How many sweets will she give to her friends?

$$\begin{aligned}\frac{2}{5} \text{ of } 75 &= \frac{2}{5} \times 75 = \frac{150}{5} = 30 \text{ sweets for herself.} \\ 20\% \text{ of } 75 &= \frac{20}{100} \times 75 = \frac{1500}{100} = 15 \text{ sweets for her sister} \\ 30 + 15 &= 45 \longrightarrow 75 - 45 = 30 \text{ sweets to her friend}\end{aligned}$$

b) How many sweets will she give to her sister?

$$\begin{aligned}20\% \text{ of } 75 \\ \downarrow \quad \downarrow \\ \frac{20}{100} \times 75 &= \frac{20 \times 75}{100} = \frac{1500}{100} \\ &= 15 \text{ sweets.}\end{aligned}$$

12)  $\frac{3}{5}$  of the students in my class have dark hair.

What percentage does not have dark hair?

$\frac{3}{5}$  have dark hair  $\rightarrow \frac{2}{5}$  doesn't have dark hair

$$\frac{2 \times 20}{5 \times 20} = \frac{40}{100} = 40\%$$

OR  $\frac{3 \times 20}{5 \times 20} = \frac{60}{100} = 60\%$  have dark hair

$100\% - 60\% = 40\%$  doesn't have dark hair

13) For the school's sports day, a group of students prepared  $12\frac{1}{2}$  liters of lemonade.

At the end of the day they had  $2\frac{3}{8}$  liters left over.

How many liters of lemonade were sold?

$$12\frac{1 \times 4}{2 \times 4} - 2\frac{3}{8}$$

$$12\frac{4}{8} - 2\frac{3}{8}$$

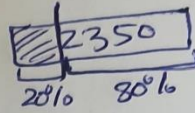
$10\frac{1}{8}$  liters of lemonade.



14) Pam bought a new laundry machine for \$1500 and a dryer for \$850.

She got a 20% on the total.

How much did she have to pay?



$$\$1500 + \$850 = \$2350$$

20% of 2350

$$\begin{array}{r} \downarrow \quad \downarrow \\ \frac{20}{100} \times 2350 = \$470 \end{array}$$

$$2350 - 470 = \$1880$$

OR

80% of 2350

$$\begin{array}{r} \downarrow \quad \downarrow \\ \frac{80}{100} \times 2350 \end{array}$$

$$= \$1880$$

15) The food I had in a restaurant totaled 150\$.

I also had to pay a 5% service charge.

What was the total amount of money I had to pay?

5% of \$150

$$\begin{array}{r} \downarrow \quad \downarrow \\ \frac{5}{100} \times 150 = \frac{75}{10} = \$7.5 \end{array}$$

$$\Rightarrow 150 + 7.5 = \$157.5$$