The Primary Stage of Grades (4-5)
School Year 2022 – 2023
Second semester

Name: **Key**

Date: / 2 / 2023

Subject: Math

Class: 4 CP (C, D, E, F & G)

Revision (2)

Objectives: Change imposer fractions to mixed numbers and vice versa
Compare and order fractions
Find fraction and percentage of quantities.
Express fractions as percentage.

1) Write the following as mixed numbers in the simplest form.

a) $\dfrac{38}{6} = 6\dfrac{2}{6} = 6\dfrac{1}{3}$

b) $\dfrac{29}{5} = 5\dfrac{4}{5}$

c) $\dfrac{34}{4} = 8\dfrac{2}{4} = 8\dfrac{1}{2}$

d) $\dfrac{52}{8} = 6\dfrac{4}{8} = 6\dfrac{1}{2}$

e) $\dfrac{73}{7} = 10\dfrac{3}{7}$

f) $\dfrac{57}{9} = 6\dfrac{3}{9} = 6\dfrac{1}{3}$

2) Write the following as improper fractions.

a) $3\dfrac{5}{9} = \dfrac{32}{9}$ (×3+ ... +9)

b) $5\dfrac{3}{8} = \dfrac{43}{8}$

c) $9\dfrac{5}{9} = \dfrac{86}{9}$

d) $6\dfrac{4}{5} = \dfrac{34}{5}$

CamScanner

3) Use the cards to make the following statement correct.

(You can use the card more than once)

| 3 | 4 | 12 | 16 |

All Possible answers:

a)

$\dfrac{1}{4}$ Of [16] is [4]

b) $\dfrac{1}{4}$ Of [12] is [3]

c) $\dfrac{1}{3}$ Of [12] is [4]

4) Complete the following statements:

a) $50\% = \dfrac{\boxed{50}}{100} = \dfrac{5}{\boxed{10}} = \dfrac{\boxed{1}}{2}$

memorize

$4 \times 25 = 100$

$\dfrac{1}{4} = \dfrac{25}{100} = 25\%$

b) $\boxed{20}\% = \dfrac{20 \div \cancel{0}}{100 \div \cancel{0}} = \dfrac{\boxed{2}}{10} = \dfrac{1}{\boxed{5}}$

$5 \times 20 = 100$

$\dfrac{1}{5} = \dfrac{20}{100} = 20\%$

c) $25\% = \dfrac{25 \div \cancel{25}}{\boxed{100} \div \cancel{25}} = \dfrac{\boxed{1}}{4}$

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5) Find the following showing your work:

a) $\dfrac{5}{8}$ of 64 = 40

b) $\dfrac{2}{9}$ of 36 = 8

c) $\dfrac{6}{9}$ of 54 = 36

d) $\dfrac{7}{10}$ of 60 = 42

e) $\dfrac{4}{7}$ of 63 = 36

f) $\dfrac{5}{15}$ of 30 = 10

g) 25% of 80 =

$\dfrac{25}{100} \times 80$ OR $\dfrac{1}{4} \times 80 = \dfrac{80}{4}$

$= 20$

h) 50% of 482 =

half of 482 = 241

i) 20 % of 30 =

$\dfrac{20}{100} \times 30 = 2 \times 3$

$= 6$

j) 100% of 305=

$\dfrac{100}{100} \times 305 = 305$

k) 40 % of 800=

$\dfrac{40}{100} \times 800 = 40 \times 8$

$= 320$

l) 35% of 700 =

$\dfrac{35}{100} \times 700 = 245$

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m) $3 \dfrac{6\times5}{9\times5} + 1 \dfrac{2\times9}{5\times9} = \dfrac{48}{45} = 1\dfrac{3}{45}$

$3\dfrac{30}{45} + 1\dfrac{18}{45} = 4\dfrac{48}{45} = 5\dfrac{3\div3}{45\div3}$

$= 5\dfrac{1}{15}$

n) $4\dfrac{10}{12} - 1\dfrac{2\times4}{3\times4}$

$4\dfrac{10}{12} - 1\dfrac{8}{12} = 3\dfrac{2}{12} = 3\dfrac{1}{6}$

6) Use > or < or = to make the following statements true:

a) 15% Of 300 $\boxed{<}$ $\dfrac{1}{2}$ of 100

$\dfrac{15}{100} \times 300$

15×3

45

$\dfrac{1}{2}$ of 100

50

b) 20% Of 180 $\boxed{>}$ $\dfrac{3}{4}$ of $\overset{9}{36}$

$\dfrac{20}{100} \times 180$

2×18

36

3×9

27

c) $\dfrac{4}{5}$ Of $\overset{9}{45}$ $\boxed{=}$ $\dfrac{4}{7}$ of $\overset{9}{63}$

4×9

36

4×9

36

d) $\dfrac{7}{5}$ $\boxed{<}$ $1\dfrac{1}{2}$

$1\dfrac{2}{5}$

$1\dfrac{1}{2}$

less than half

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make both mixed #'s then compare

e) $\dfrac{13}{2}$ ☐ $\dfrac{19}{7}$

$6\dfrac{1}{2} > 2\dfrac{5}{7}$

f) $6\dfrac{\cancel{3}^{1}}{\cancel{9}_{3}}$ ☐ $=$ ☐ $6\dfrac{1}{3}$

7) Order starting with the smallest:

a) $\dfrac{1}{2}$ $\dfrac{35}{100}$ 80% $\dfrac{3}{4}$ *make all fraction at of 100*

$\dfrac{50}{100}$ $\dfrac{35}{100}$ $\dfrac{80}{100}$ $\dfrac{75}{100}$

Smallest: $\dfrac{35}{100}$ $\dfrac{50}{100}$ $\dfrac{75}{100}$ $\dfrac{80}{100}$

b) $\dfrac{5}{10}$ $2\dfrac{3}{6}$ $\dfrac{3}{9}$ $\dfrac{16}{9}$ $\dfrac{13}{13}$ *change improper To mixed & Simplify the Order*

$\dfrac{1}{2}$ $2\dfrac{1}{2}$ $\dfrac{1}{3}$ $1\dfrac{7}{9}$ 1 whole

Smallest:

$\dfrac{1}{3}$, $\dfrac{1}{2}$, 1 whole , $1\dfrac{7}{9}$, $2\dfrac{1}{2}$

c) $4\dfrac{5}{10}$ $\dfrac{7}{12}$ $\dfrac{8}{16}=\dfrac{1}{2}$ $\dfrac{45}{9}=5$ $\dfrac{3}{8}$ *same*

              more than ½   *less than half*

Smallest:

$\dfrac{3}{8}$, $\dfrac{1}{2}$, $\dfrac{7}{12}$, $4\dfrac{5}{10}$, 5

$=$ **MATH**

is so much fun!

8) Solve the following:

$Total = \frac{40}{40} = 1 \text{ whole} = 100\%$

a)   In an ice-cream survey, 40 children choose their favorite ice cream.
$\frac{1}{4}$ **One quarter of the children** choose chocolate ice-cream, **two fifths** $\frac{2}{5}$
of the children choose vanilla ice-cream, and the rest choose
strawberry ice-cream.

i) How many children choose **chocolate ice-cream?**

$\frac{1}{4}$ of 40 = $\frac{1}{4} \times \overset{10}{40}$ = 10 children choose chocolate ice-cream

ii)   What percentage choose **chocolate ice-cream?**

↳ means fraction out of 100

$\frac{1+25}{4 \times 25} = \frac{\boxed{25}}{100}$ = $\frac{25}{}$ %   25%

iii)   How many children choose **Vanilla ice-cream?**

$\frac{2}{5}$ of 40 = $\frac{2}{5} \times \overset{8}{40}$ = 16 children choose Vanilla ice-cream

iv)   What percentage choose **Vanilla ice-cream?**

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

v)   How many children choose **Strawberry ice-cream?** And What
fraction is that?

$\frac{14 \div 2}{40 \div 2} = \frac{7}{20}$

Total 40

Chocolate 10 children + Vanilla 16 children + Strawberry ?

10 + 16 + — = 40

26 + — = 40

40 - 26 = 14 children choose Strawberry

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b) There are 36 pupils in Justin's class.

$\frac{1}{6}$ one sixth $\times$ of the pupils went to the museum, $\overset{36}{}$

25% of the pupils went to the zoo,

50% of the pupils went to the Theme Park.

The rest **didn't go** on the trip?
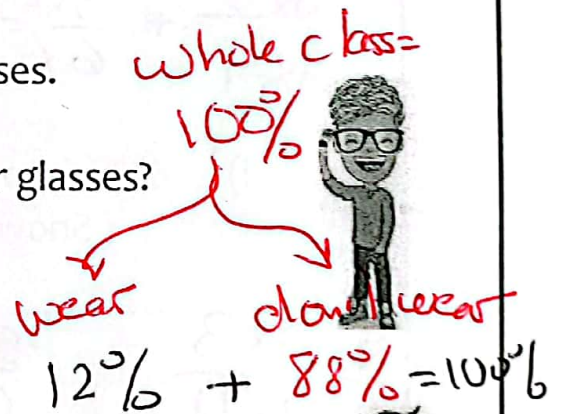
How many pupils didn't go on the trip?

Went to Museum	Went to Zoo	Went to Theme Park	Didn't Go
$\frac{1}{6} \times 36 = \frac{36}{6}$ $= 6$	25% of 36 ↓ $\frac{1}{4} \times 36 = \frac{36}{4}$ $= 9$	50% of 36 $\frac{1}{2} \times 36 =$ $\frac{36}{2} = 18$	$6 + 9 + 18 = 33$ $36 - 33 = \textcircled{3}$

c) In a class, 88% of the children **don't wear** glasses.

whole class = 100%

i) What percentage of the students wear glasses?

$100\% - 88\% = 12\%$

wear   don't wear

$12\% + 88\% = 100\%$

ii) What fraction of the students wear glasses?

(in the simplest form)

$\frac{12 \div 4}{100 \div 4} = \frac{3}{25}$

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d) The penguin nursery takes two breaks every day, first break for $\frac{2}{3}$ hour at noon and $\frac{5}{12}$ hour in the afternoon. How long does the penguin nursery take break in total every day?

$$\frac{4\times 2}{4\times 3} + \frac{5}{12} =$$

$$\frac{8}{12} + \frac{5}{12} = \frac{13}{12} = 1\frac{1}{12} \text{ hr. the penguin Nursery}$$
$$\text{Take break every day.}$$

e) Jack spent **three quarters** of an hour biking and $\frac{5}{6}$ of an hour jogging. Afterwards, he swam for $\frac{1}{8}$ of an hour.

i) How much time did Jack exercise before he went swimming?

$$\frac{3\times 3}{3\times 4} + \frac{5\times 2}{6\times 2} = \qquad \frac{9}{12} + \frac{10}{12} = \frac{19}{12} = 1\frac{7}{12} \text{ hr. he exercise}$$
$$\text{before swimming}$$

i) Which sport took him the longest time to finish?
(Show your work)

$$\frac{9}{12} \quad \frac{3\times 3}{3\times 4} \qquad \frac{5\times 2}{6\times 2} \quad \frac{10}{12} \quad \boxed{\frac{1}{8}}$$

swimming   Biking   Jogging
$$\frac{1}{8} \qquad\qquad \frac{9}{12} \qquad \frac{10}{12}$$

Jogging took him the Longest Time.

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