

Mathematics

Grade 4

Week: 17 August 2020 to 21 August 2020

Dear learners

Please complete the following pages of workbook 2 for Term 3:

Topic : Common Fractions

Day	Date	Pages to complete
Monday	17 /08/2020	14,15,16
Tuesday	18 /08/2020	17,18,19
Wednesday	19 /08/2020	20,21,22
Thursday	20 /08/2020	23,24,25
Friday	21 /08/2020	11,12,13

Check your work with the answers provided in the memo below. Please do not print out the memo.

Thank you. Be safe. Stay Safe.

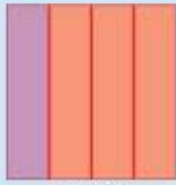
A.Dewrajh

17 August 2020

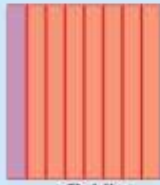
Look at the fractions. Talk about them.



Halves



Quarters



Eighths

1. Write an equivalent fraction for:

a. $\frac{1}{4} = \frac{2}{8}$

b. $\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$

c. $\frac{6}{8} = \frac{3}{4}$

d. $\frac{2}{4} = \frac{1}{2} = \frac{4}{8}$

e. $\frac{2}{2} = \frac{4}{4} = \frac{8}{8}$

f. $\frac{2}{8} = \frac{1}{4}$

g. $\frac{8}{8} = \frac{2}{2} = \frac{4}{4}$

h. $\frac{4}{8} = \frac{1}{2} = \frac{2}{4}$

i. $\frac{4}{4} = \frac{2}{2} = \frac{8}{8}$

2. Fill in <, > or =.

a. $\frac{1}{2} > \frac{1}{4}$

b. $\frac{1}{2} > \frac{2}{8}$

c. $\frac{1}{4} < \frac{3}{8}$

d. $\frac{1}{2} = \frac{2}{4}$

e. $\frac{2}{2} > \frac{1}{8}$

f. $\frac{5}{8} > \frac{2}{4}$

g. $\frac{2}{4} < \frac{8}{8}$

h. $\frac{1}{4} < \frac{4}{8}$

i. $\frac{4}{8} = \frac{1}{2}$

j. $\frac{1}{2} < \frac{4}{4}$

k. $\frac{1}{2} > \frac{1}{8}$

l. $\frac{5}{8} > \frac{1}{2}$

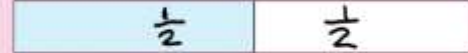
m. $\frac{1}{2} < \frac{7}{8}$

n. $\frac{3}{4} > \frac{1}{8}$

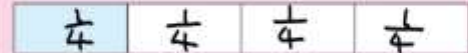
o. $\frac{1}{4} < \frac{6}{8}$

3. Complete the following using the diagram to guide you: 17/08/2020

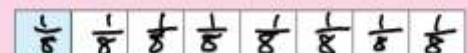
a. One whole = $\frac{1}{2} + \frac{1}{2}$



b. One whole = $\frac{1}{4} + \frac{3}{4}$



c. One whole = $\frac{1}{8} + \frac{7}{8}$



4. Draw a picture to solve the following:

Palesa had 1 quarter of the cake, and July had 2 eighths of the cake. Who had the most cake?



$$\frac{1}{8} + \frac{1}{4} = \frac{1}{4}$$

for Palesa

$$\frac{1}{8} + \frac{1}{8} = \frac{2}{8}$$

for July

$\frac{1}{4} = \frac{2}{8}$
So they both had the same amount.

John had four eighths of the cool drink and Ben had half of the cool drink. Did they have the same amount of cool drink?



$$\frac{4}{8} = \frac{1}{2}$$

Yes they had the same amount of cool drink.

Fractions in circles

Divide the circle into eighths.



Show one quarter of the circle.

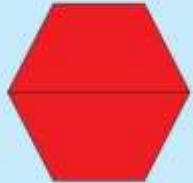
$$\frac{1}{4}$$

Show one half of the circle.

$$\frac{1}{2}$$

17/08/2020

Look at the fractions. Talk about them.



Halves



Thirds



Sixths

1. Write an equivalent fraction for each of the following.

a. $\frac{1}{2} = \frac{3}{6}$

b. $\frac{2}{6} = \frac{1}{3}$

c. $\frac{4}{6} = \frac{2}{3}$

d. $\frac{1}{3} = \frac{2}{6}$

e. $\frac{2}{2} = \frac{3}{3} \text{ or } \frac{6}{6}$

f. $\frac{3}{6} = \frac{1}{2}$

g. $\frac{2}{3} = \frac{4}{6}$

h. $\frac{6}{6} = \frac{3}{3} \text{ or } \frac{2}{2}$

i. $\frac{3}{3} = \frac{2}{2} \text{ or } \frac{6}{6}$

2. Fill in $<$, $>$ or $=$.

a. $\frac{1}{2} > \frac{1}{3}$

b. $\frac{1}{2} > \frac{2}{6}$

c. $\frac{1}{3} < \frac{3}{6}$

d. $\frac{1}{2} < \frac{2}{3}$

e. $\frac{2}{3} > \frac{1}{6}$

f. $\frac{5}{6} > \frac{2}{3}$

g. $\frac{2}{3} < \frac{6}{6}$

h. $\frac{1}{3} < \frac{4}{6}$

i. $\frac{4}{6} > \frac{1}{2}$

j. $\frac{1}{2} < \frac{3}{3}$

k. $\frac{1}{2} > \frac{1}{6}$


l. $\frac{5}{6} > \frac{1}{2}$

18/08/2020

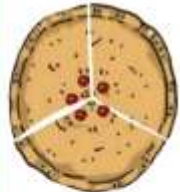
3. Complete the following using the diagram to help you:


a. One whole = $\frac{1}{2} + \frac{1}{2}$ 

b. One whole = $\frac{1}{3} + \frac{2}{3}$ 


c. One whole = $\frac{1}{6} = \frac{5}{6}$ 

4. Write a word problem for each and solve it.

a.  Mother shared the apple pie between myself, herself and my father. What fraction did we each get?
 $1 \div 3 = \frac{1}{3}$

b.  Any word problem eg. Sam and I shared a pie
 $1 \div 2 = \frac{1}{2}$
We each had $\frac{1}{2}$ pie.

c.  Any word problem
 $1 \div 6 = \frac{1}{6}$

d.  Any word problem
 $1 \div 8 = \frac{1}{8}$

Thinking fractions

Three children have to share 12 oranges equally so that nothing remains.
How many oranges will each child get?

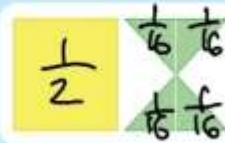
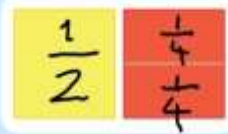
You might need to make a drawing to help you to solve this.



$12 \div 3 = 4$
Each child will get 4 oranges.

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Talk about these yellow whole squares and the fractions.






Term 3

1. Use two yellow squares as the whole.

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

a. The yellow square  is what part of the whole? b. The red rectangle  is what part of the whole? c. The blue triangle  is what part of the whole? d. The green triangle  is what part of the whole?

2. Answer these questions.

a. How many green triangles  are in one blue triangle ? b. How many green triangles  are in one red rectangle ? c. How many green triangles  are in one yellow square ?

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d. How many blue triangles  are in one yellow square ? e. How many red rectangles  are in one yellow square ?

3. Draw the missing fraction pieces.



Make my own sums

Make five of your own sums using the shapes on the left.

$$\square = \square + \square$$

$$\square = \square + \square$$

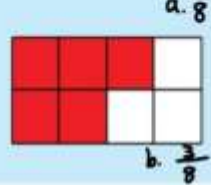
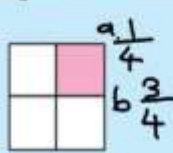
$$\square = \square + \square$$

↑ make more

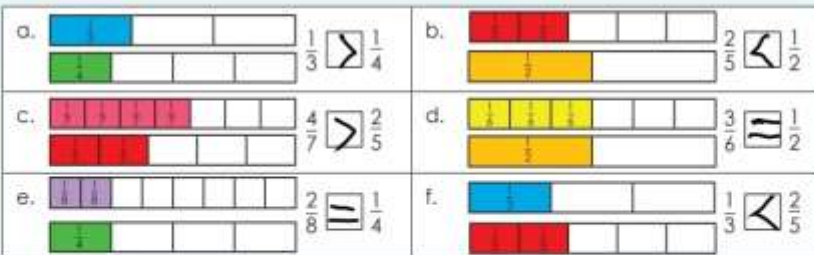
Comparing, ordering and adding fractions

19/08/2020

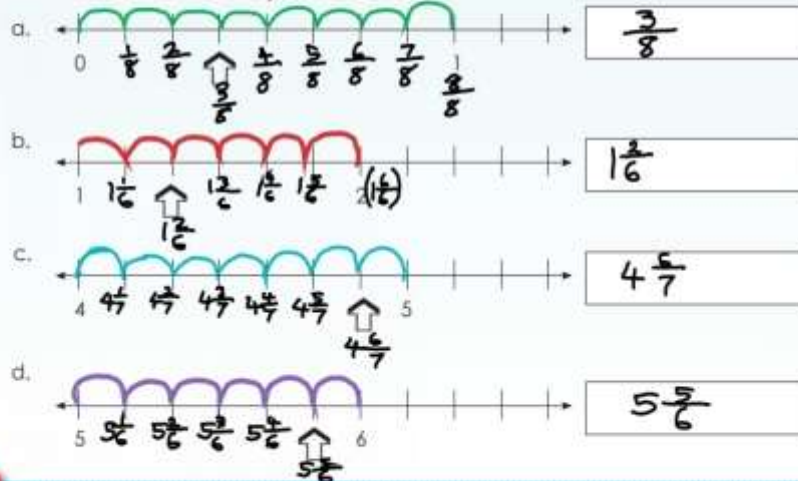
- a. What fraction of the diagrams below has been coloured?
b. What fraction of the diagrams below has not been coloured?



1. Fill in $>$, $<$ or $=$.

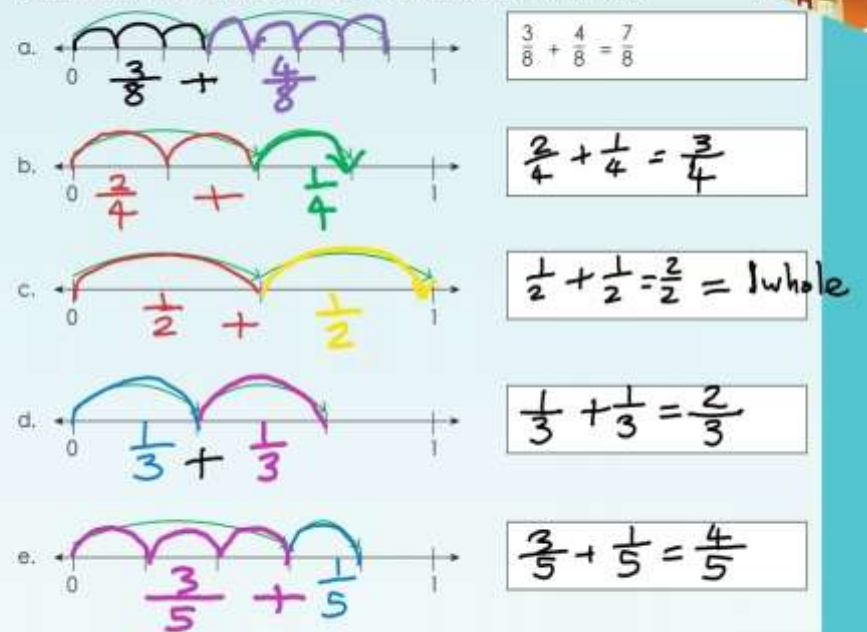


2. What fractions are shown by the arrow?

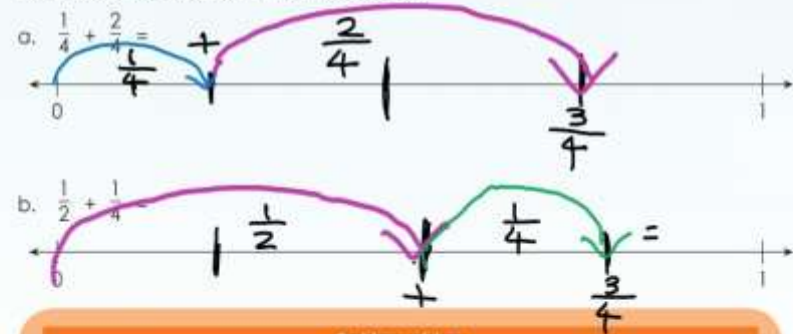


19/08/2020

3. Write a sum for the number lines below and calculate the answers.



4. Draw number lines for the following sums.

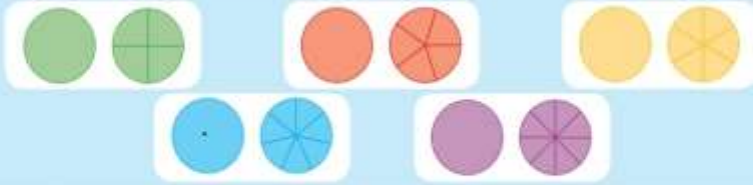


Problem solving

A chocolate cake is cut into 30 pieces. If a fifth has been eaten, how many pieces are left?

19/08/2020

Talk about these fraction circles.



1. Write a sum for the following:

$$\text{Green circle} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

$$\text{Orange circle} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$$

$$\text{Yellow circle} = \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$$

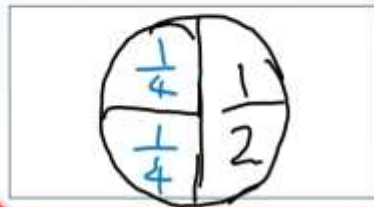
$$\text{Blue circle} = \frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7}$$

$$\text{Purple circle} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$$

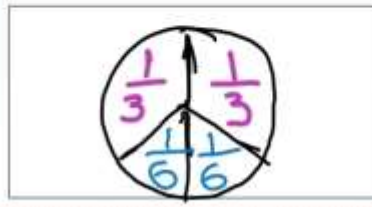
Which is greater, $\frac{1}{4}$ or $\frac{1}{7}$?

2. Challenge: Draw fraction circles to show the following:

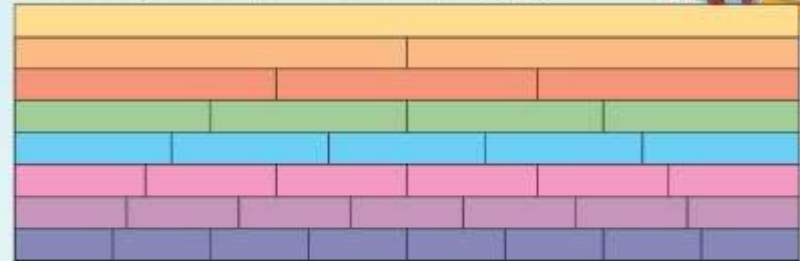
a. $\frac{1}{4} + \frac{1}{4} + \frac{1}{2} = 1$ whole



b. $\frac{1}{3} + \frac{1}{3} + \frac{2}{6} = 1$ whole



3. Use the diagram to complete the sums. 20/08/2020



a. $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

b. $\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$

c. $\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$

d. $\frac{1}{6} + \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$

e. $\frac{3}{7} + \frac{2}{7} = \frac{5}{7}$

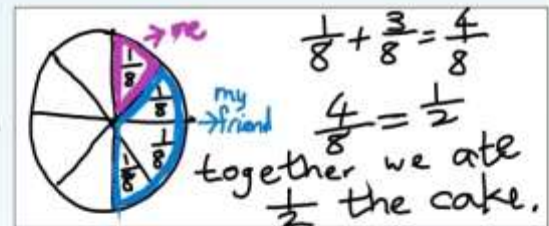
f. $\frac{5}{8} + \frac{1}{8} = \frac{6}{8} = \frac{3}{4}$

g. $\frac{4}{8} + \frac{3}{8} = \frac{7}{8}$

h. $\frac{3}{5} + \frac{2}{5} = \frac{5}{5} = 1$ whole

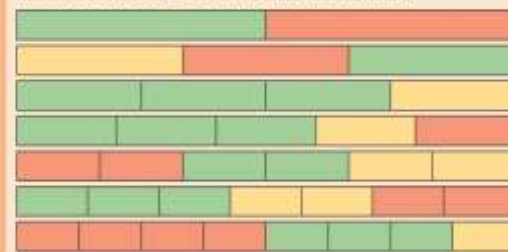
i. $\frac{1}{6} + \frac{4}{6} = \frac{5}{6}$

4. At the party I had $\frac{1}{8}$ of the cake and my friend had $\frac{3}{8}$. How much cake did we have altogether? Make a drawing to show your answer.



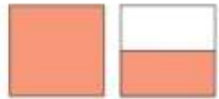
Fraction fun

Make seven sums using the colours on each fraction strip.



20/08/2020

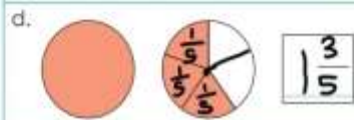
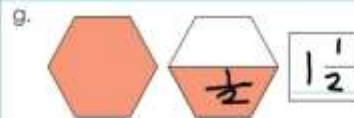
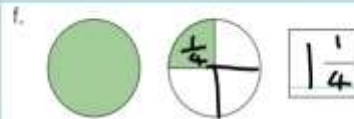
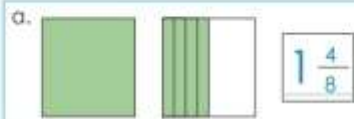
What is each picture telling you?



We say that these are mixed numbers.

Think carefully with the next two.

1. Write the following as mixed numbers:



2. Calculate the following.

20/08/2020

a. $\frac{2}{6} + \frac{2}{6} = \frac{4}{6}$

b. $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

c. $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

d. $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$

e. $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$

f. $\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$

g. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$

h. $\frac{4}{8} + \frac{2}{8} = \frac{6}{8}$

i. $\frac{1}{6} + \frac{3}{6} = \frac{4}{6}$

j. $\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$

Thinking fractions

Make a sum for each diagram.



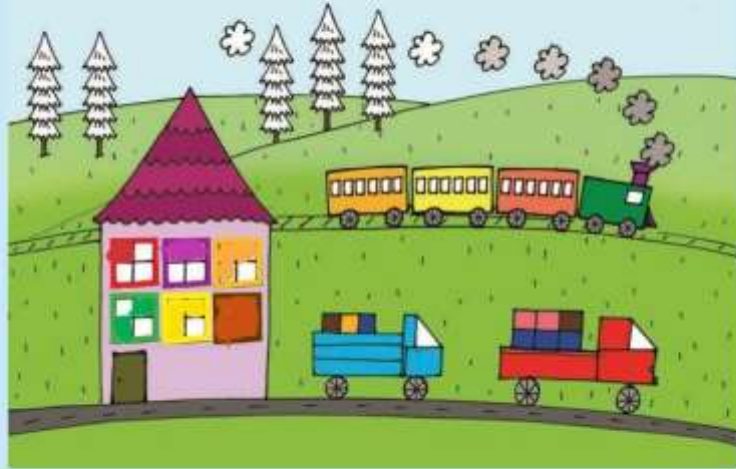
$$\frac{3}{8} + \frac{1}{8} = \frac{4}{8}$$



$$\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$$

21/08/2020

Term 3



1. Colour the following on the picture above:

- One quarter of the red window.
- Two quarters of the purple window.
- Three quarters of the orange window.
- One quarter plus one quarter of the green window.
- Two quarters plus one quarter of the yellow window.
- Two quarters plus two quarters of the brown window.
- One fifth of the first tree light green and the rest dark green.
- Two fifths of the second tree light green and the rest dark green.
- One fifth of the third tree light green, two fifths dark green and the rest yellow.
- Three fifths of the fourth tree green and the rest yellow.
- Colour the fifth tree and explain it here.

2. Look at the train in the picture on the previous page and answer the following:

21/08/2020

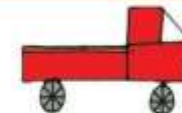
- How many passenger carriages does the train have?
- What fraction is yellow? Orange? Red?
- The wheels are divided into parts. Write one part as a fraction.
- Each passenger carriage has windows. Write one window as a fraction.
- Colour in two sixths of the yellow carriage windows, four sixths of the orange carriage windows, five sixths of the red carriage windows.

3. Answer the questions on the small trucks.

- How many boxes are on the blue truck? What fraction is yellow? What fraction is blue? What fraction is brown?
Write an addition sum for it: $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{3}{3} = 1 \text{ whole}$
- How many boxes are on the red truck? What fraction is pink? What fraction is blue? What fraction is brown?
Write an addition sum for it? $\frac{2}{6} + \frac{2}{6} + \frac{1}{6} = \frac{5}{6} = 1 \text{ whole}$

My own questions

Look at the pictures and make your own fraction questions. Remember it should be different from the questions in this worksheet.



There is an open space on the picture on the previous page (page 26). Draw something that will fit into the picture and then write a fraction question for it.