

# C O N T E N T S

## GRADE 5

1.	Numbers to 100 000 .....	2
2.	Addition and Subtraction with Whole Numbers.....	4
3.	Multiplication and Division with Whole Numbers .....	8
4.	Time and Speed .....	12
5.	Perimeter and Area .....	14
6.	Angles and Triangles.....	18
7.	2-D Shapes .....	24
8.	3-D Figures.....	26
	<b>Midway Test</b> .....	30
9.	Fractions .....	36
10.	Decimals.....	40
11.	Operations with Decimals .....	42
12.	Money .....	48
13.	Capacity, Volume, and Mass .....	52
14.	Patterning .....	56
15.	Transformations and Coordinates.....	58
16.	Graphs and Probability .....	62
	<b>Final Test</b> .....	66
	Answers .....	73

## WORDS TO LEARN

**Fraction** - a number showing a part of a whole

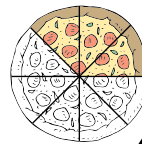
**Proper fraction** - a fraction with the numerator smaller than the denominator

**Improper fraction** - a fraction with the numerator greater than the denominator

**Mixed number** - a number formed by a whole number and a proper fraction

**Equivalent fractions** - fractions that represent the same value

**Simplest form** - a fraction in which the numerator and denominator have only 1 as their common factor



$\frac{3}{8}$  are coloured.

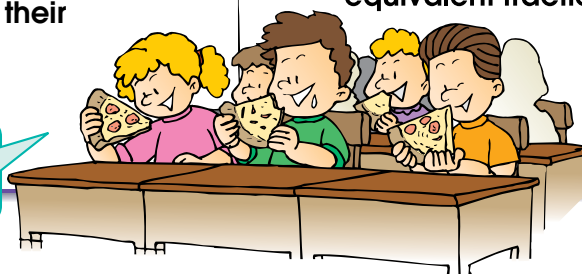
$\frac{4}{5}$  ← Proper fraction

$\frac{7}{3}$  ← Improper fraction

$1\frac{3}{4}$  ← Mixed number

$\frac{1}{2} = \frac{2}{4}$ ,  $\frac{1}{2}$  and  $\frac{2}{4}$  are equivalent fractions.

$\frac{2}{5}$  and  $\frac{7}{9}$  are fractions in simplest form.



**Use division to change the improper fractions to mixed numbers.**

①  $\frac{9}{7} =$  \_\_\_\_\_

②  $\frac{4}{3} =$  \_\_\_\_\_

③  $\frac{7}{2} =$  \_\_\_\_\_

④  $\frac{19}{4} =$  \_\_\_\_\_

⑤  $\frac{15}{8} =$  \_\_\_\_\_

⑥  $\frac{20}{9} =$  \_\_\_\_\_

⑦  $\frac{16}{7} =$  \_\_\_\_\_

⑧  $\frac{10}{9} =$  \_\_\_\_\_

⑨  $\frac{21}{5} =$  \_\_\_\_\_

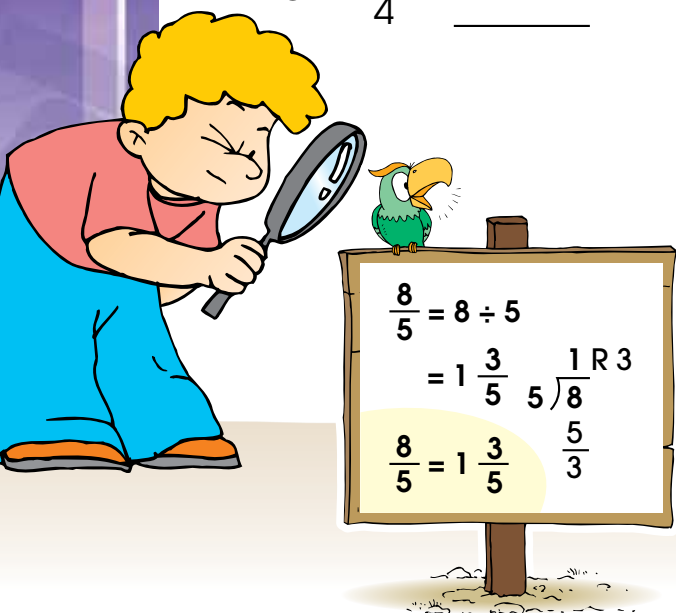
⑩  $\frac{15}{4} =$  \_\_\_\_\_

⑪  $\frac{17}{6} =$  \_\_\_\_\_

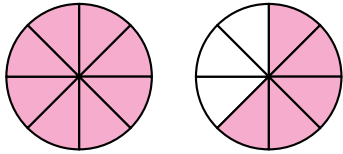
⑫  $\frac{25}{8} =$  \_\_\_\_\_

⑬  $\frac{9}{4} =$  \_\_\_\_\_

⑭  $\frac{13}{5} =$  \_\_\_\_\_



**Change the mixed numbers to improper fractions.**



$$1 \frac{5}{8} = \frac{1 \times 8 + 5}{8} = \frac{13}{8}$$



Multiply the whole number by the denominator and add the numerator.

⑮  $2 \frac{1}{3} = \underline{\hspace{2cm}}$

⑯  $1 \frac{3}{7} = \underline{\hspace{2cm}}$

⑰  $2 \frac{1}{5} = \underline{\hspace{2cm}}$

⑱  $1 \frac{4}{9} = \underline{\hspace{2cm}}$

⑲  $4 \frac{2}{3} = \underline{\hspace{2cm}}$

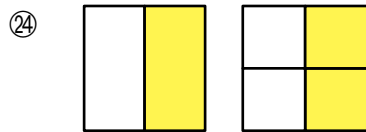
⑳  $5 \frac{7}{8} = \underline{\hspace{2cm}}$

㉑  $2 \frac{1}{6} = \underline{\hspace{2cm}}$

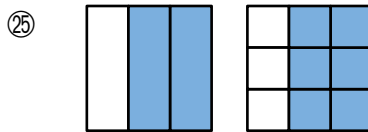
㉒  $1 \frac{3}{4} = \underline{\hspace{2cm}}$

㉓  $7 \frac{1}{3} = \underline{\hspace{2cm}}$

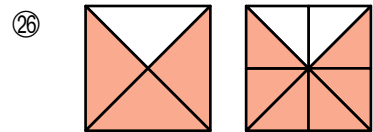
**Write the equivalent fractions.**



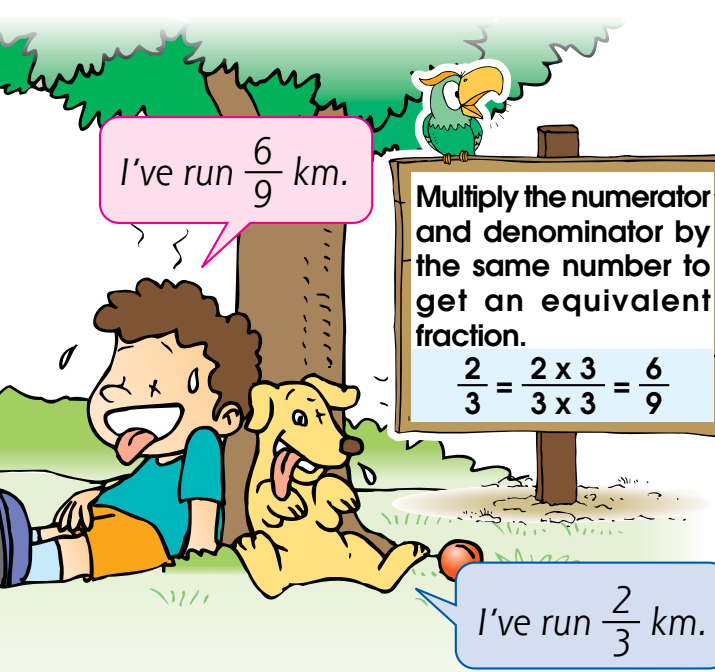
$$\frac{1}{2} = \frac{\hspace{1cm}}{4}$$



$$\frac{2}{3} = \frac{\hspace{1cm}}{9}$$



$$\frac{3}{4} = \frac{6}{\hspace{1cm}}$$



㉓  $\frac{4}{7} = \frac{\hspace{1cm}}{21}$

x 3 (above arrow), x 3 (below arrow)

㉔  $\frac{2}{5} = \frac{\hspace{1cm}}{10}$

x 2 (above arrow), x 2 (below arrow)

㉕  $\frac{5}{6} = \frac{\hspace{1cm}}{12}$

㉖  $\frac{1}{4} = \frac{\hspace{1cm}}{12}$

㉗  $\frac{7}{10} = \frac{\hspace{1cm}}{30}$

㉘  $\frac{5}{8} = \frac{\hspace{1cm}}{24}$

㉙  $\frac{1}{3} = \frac{\hspace{1cm}}{15}$

㉚  $\frac{6}{7} = \frac{\hspace{1cm}}{28}$

㉛  $\frac{7}{8} = \frac{\hspace{1cm}}{16}$

㉜  $\frac{2}{3} = \frac{\hspace{1cm}}{18}$



$\frac{2}{3}$  and  $\frac{6}{9}$  are equivalent fractions. Billy and his dog have run the same distance.

Write the fractions in simplest form.

37)  $\frac{20}{30} = \frac{\quad}{3}$

38)  $\frac{16}{20} = \frac{\quad}{5}$

39)  $\frac{12}{15} = \frac{\quad}{\quad}$

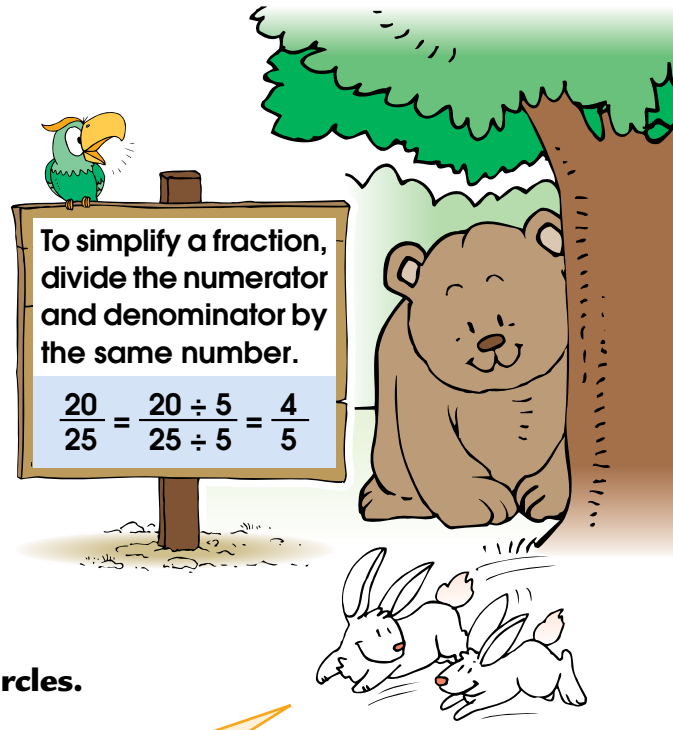
40)  $\frac{42}{54} = \frac{\quad}{\quad}$

41)  $\frac{6}{36} = \frac{\quad}{\quad}$

42)  $\frac{63}{81} = \frac{\quad}{\quad}$

43)  $\frac{8}{12} = \frac{\quad}{\quad}$

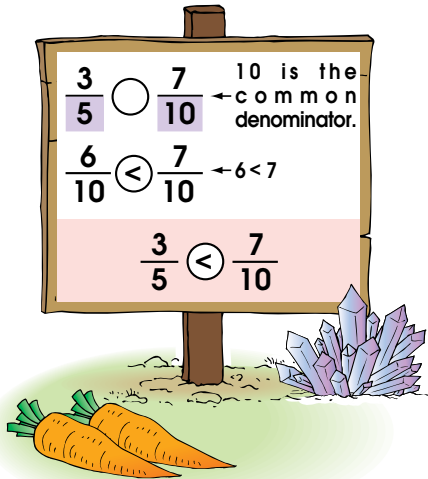
44)  $\frac{18}{24} = \frac{\quad}{\quad}$



To simplify a fraction, divide the numerator and denominator by the same number.

$$\frac{20}{25} = \frac{20 \div 5}{25 \div 5} = \frac{4}{5}$$

Compare the fractions. Put ">" or "<" in the circles.



To compare fractions, find a common denominator and compare the numerators.

45)  $\frac{2}{3} \bigcirc \frac{5}{6}$

46)  $\frac{4}{7} \bigcirc \frac{5}{14}$

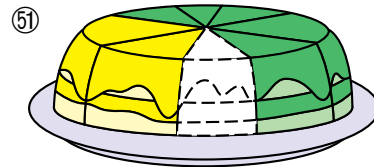
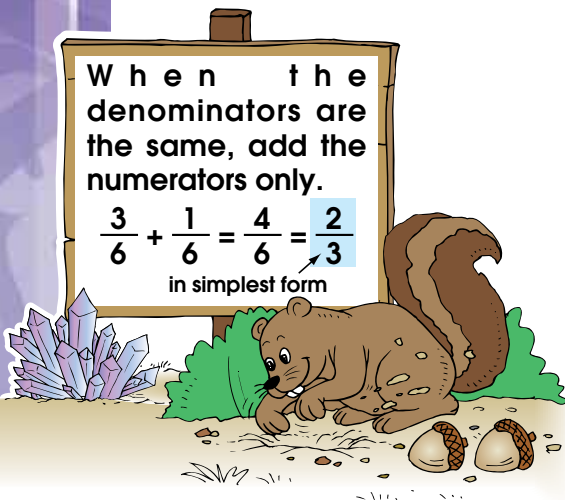
47)  $\frac{8}{9} \bigcirc \frac{25}{27}$

48)  $\frac{11}{24} \bigcirc \frac{3}{8}$

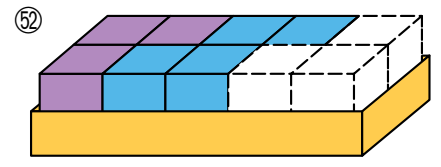
49)  $\frac{7}{10} \bigcirc \frac{4}{5}$

50)  $\frac{2}{5} \bigcirc \frac{7}{15}$

Do the addition. Write the answers in simplest form.



51)  $\frac{3}{8} + \frac{5}{8} = \frac{\quad}{\quad}$



52)  $\frac{3}{10} + \frac{4}{10} = \frac{\quad}{\quad}$

53)  $\frac{7}{12} + \frac{1}{12} = \frac{\quad}{\quad}$

54)  $\frac{2}{9} + \frac{5}{9} = \frac{\quad}{\quad}$

55)  $\frac{3}{16} + \frac{3}{16} = \frac{\quad}{\quad}$

56)  $\frac{1}{15} + \frac{8}{15} = \frac{\quad}{\quad}$

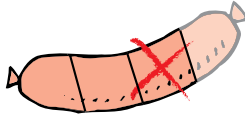
Write the answers in simplest form.

57



$$\frac{5}{10} - \frac{2}{10} = \underline{\hspace{2cm}}$$

58



$$\frac{3}{4} - \frac{1}{4} = \underline{\hspace{2cm}}$$

59

$$\frac{5}{6} - \frac{1}{6} = \underline{\hspace{2cm}}$$

60

$$\frac{7}{9} - \frac{2}{9} = \underline{\hspace{2cm}}$$

61

$$\frac{11}{15} - \frac{5}{15} = \underline{\hspace{2cm}}$$

62

$$\frac{10}{12} - \frac{5}{12} = \underline{\hspace{2cm}}$$

Show your work. Then write the mixed numbers in simplest form.

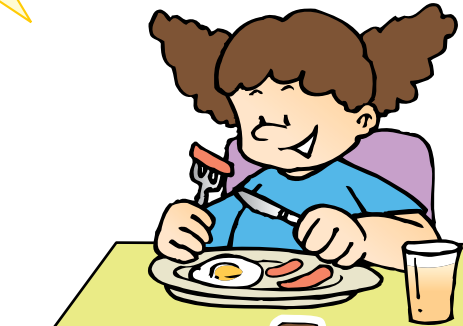
63  $\frac{8}{9} + \frac{4}{9} = \frac{\hspace{1cm}}{9} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

64  $\frac{5}{6} + \frac{5}{6} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

65  $\frac{7}{10} + \frac{9}{10} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

66  $\frac{6}{12} + \frac{10}{12} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

I have  $\frac{3}{4}$  of a sausage. After eating  $\frac{1}{4}$  of it, I'll have half of a sausage left.



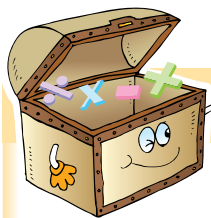
When the denominators are the same, subtract the numerators only.

$$\frac{5}{8} - \frac{3}{8} = \frac{2}{8} = \frac{1}{4}$$

in simplest form


$\frac{5}{8} + \frac{7}{8} = \frac{12}{8} = 1 \frac{4}{8}$   
 $= 1 \frac{1}{2}$


1st Add the numerators.  
 2nd Write as a mixed number.  
 3rd Write in simplest form.

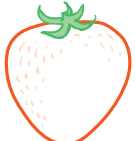


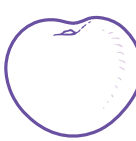
# ACTIVITY

Carrie the Carrot likes the jam with the greatest value. Help him write the answers in simplest form and fill in the blank.

1  $\frac{3}{15} + \frac{6}{15} =$  

2  $\frac{14}{15} - \frac{3}{15} =$  

3  $\frac{4}{15} + \frac{2}{15} =$  

4  $\frac{13}{15} - \frac{7}{15} =$  



I like \_\_\_\_\_ - flavoured jam.