2.FRACTION

2.1 Write the proper fraction in words :

No.	Fractions	Words
1	$\dfrac{3}{4}$	
2	$\dfrac{7}{8}$	
3	$\dfrac{2}{3}$	
4	$\dfrac{4}{5}$	
5	$\dfrac{3}{7}$	
6	$\dfrac{4}{9}$	
7	$\dfrac{5}{8}$	
8	$\dfrac{6}{7}$	
9	$\dfrac{1}{6}$	
10	$\dfrac{3}{8}$	
11	$\dfrac{2}{9}$	
12	$\dfrac{1}{9}$	
13	$\dfrac{2}{5}$	
14	$\dfrac{5}{6}$	
15	$\dfrac{3}{4}$	
16	$\dfrac{1}{8}$	
17	$\dfrac{9}{10}$	
18	$\dfrac{3}{10}$	
19	$\dfrac{7}{10}$	
20	$\dfrac{1}{10}$	

2.2   Convert proper fractions to equivalent fractions :

No.	Proper Fractions	Equivalent Fractions
1	$\frac{3}{4}$	
2	$\frac{7}{8}$	
3	$\frac{2}{3}$	
4	$\frac{4}{5}$	
5	$\frac{3}{7}$	
6	$\frac{4}{9}$	
7	$\frac{5}{8}$	
8	$\frac{6}{7}$	
9	$\frac{1}{6}$	
10	$\frac{3}{8}$	
11	$\frac{2}{9}$	
12	$\frac{1}{9}$	
13	$\frac{2}{5}$	
14	$\frac{5}{6}$	
15	$\frac{3}{4}$	
16	$\frac{1}{8}$	
17	$\frac{9}{10}$	
18	$\frac{3}{10}$	
19	$\frac{7}{10}$	
20	$\frac{1}{10}$	

2.3 Convert fraction to its simplest form :

No.	Fractions	Simplest Form
1	$\dfrac{6}{8}$	
2	$\dfrac{8}{12}$	
3	$\dfrac{4}{6}$	
4	$\dfrac{6}{10}$	
5	$\dfrac{6}{14}$	
6	$\dfrac{6}{16}$	
7	$\dfrac{4}{10}$	
8	$\dfrac{4}{14}$	
9	$\dfrac{4}{18}$	
10	$\dfrac{6}{21}$	
11	$\dfrac{8}{14}$	
12	$\dfrac{8}{16}$	
13	$\dfrac{8}{18}$	
14	$\dfrac{10}{12}$	
15	$\dfrac{10}{14}$	
16	$\dfrac{10}{16}$	
17	$\dfrac{10}{18}$	
18	$\dfrac{12}{16}$	
19	$\dfrac{18}{45}$	
20	$\dfrac{14}{42}$	

2.4

a) Convert Improper Fractions to a Mixed Numbers :

No.	Improper Fractions	Mixed Numbers
1	$\frac{7}{2}$	
2	$\frac{7}{3}$	
3	$\frac{14}{6}$	
4	$\frac{12}{7}$	
5	$\frac{14}{9}$	
6	$\frac{22}{3}$	
7	$\frac{13}{3}$	
8	$\frac{7}{6}$	
9	$\frac{5}{4}$	
10	$\frac{5}{3}$	
11	$\frac{7}{4}$	
12	$\frac{13}{2}$	
13	$\frac{20}{7}$	
14	$\frac{13}{2}$	
15	$\frac{12}{8}$	
16	$\frac{15}{9}$	
17	$\frac{17}{8}$	
18	$\frac{10}{6}$	
19	$\frac{9}{7}$	
20	$\frac{9}{5}$	

a) Convert Improper Fractions to a Mixed Numbers :

b) Convert Mixed Numbers to Improper Fractions :

No.	Mixed Numbers	Improper Fractions
1	$1\dfrac{1}{2}$	
2	$2\dfrac{1}{3}$	
3	$4\dfrac{1}{6}$	
4	$2\dfrac{1}{7}$	
5	$5\dfrac{1}{9}$	
6	$5\dfrac{2}{3}$	
7	$1\dfrac{1}{3}$	
8	$3\dfrac{5}{6}$	
9	$7\dfrac{1}{4}$	
10	$1\dfrac{2}{3}$	
11	$6\dfrac{3}{4}$	
12	$9\dfrac{1}{2}$	
13	$1\dfrac{2}{7}$	
14	$4\dfrac{1}{5}$	
15	$7\dfrac{1}{8}$	
16	$2\dfrac{5}{9}$	
17	$5\dfrac{7}{8}$	
18	$7\dfrac{1}{6}$	
19	$1\dfrac{4}{7}$	
20	$4\dfrac{4}{5}$	

2.5 i) Add / Subtract fraction with the different denominator :
(Proper Fraction with Proper Fraction)

No.	Question	Working Step	Answer
1	$\dfrac{7}{8} + \dfrac{1}{2}$		
2	$\dfrac{1}{6} + \dfrac{2}{3}$		
3	$\dfrac{2}{5} + \dfrac{1}{2}$		
4	$\dfrac{3}{7} + \dfrac{1}{4}$		
5	$\dfrac{1}{2} + \dfrac{8}{9}$		
6	$\dfrac{5}{8} + \dfrac{1}{4}$		
7	$\dfrac{6}{7} + \dfrac{1}{4}$		
8	$\dfrac{1}{6} + \dfrac{3}{5}$		
9	$\dfrac{2}{3} + \dfrac{1}{6}$		
10	$\dfrac{2}{5} + \dfrac{2}{3}$		
11	$\dfrac{1}{2} - \dfrac{1}{6}$		
12	$\dfrac{1}{3} - \dfrac{1}{6}$		
13	$\dfrac{1}{2} - \dfrac{3}{8}$		

No.	Question	Working Step	Answer
14	$\dfrac{1}{4} - \dfrac{1}{8}$		
15	$\dfrac{5}{6} - \dfrac{5}{9}$		
16	$\dfrac{5}{8} - \dfrac{1}{2}$		
17	$\dfrac{8}{9} - \dfrac{1}{3}$		
18	$\dfrac{1}{5} - \dfrac{1}{10}$		
19	$\dfrac{3}{5} - \dfrac{1}{10}$		
20	$\dfrac{9}{10} - \dfrac{4}{5}$		

ii) Add / subtract mixed number with Proper Fractions(same denominator) :

No.	Question	Working Step	Answer
1	$5\dfrac{7}{8} + \dfrac{3}{8}$		
2	$2\dfrac{2}{3} + \dfrac{2}{3}$		
3	$\dfrac{2}{5} + 1\dfrac{4}{5}$		
4	$\dfrac{3}{7} + 6\dfrac{5}{7}$		
5	$\dfrac{4}{9} + 4\dfrac{8}{9}$		

No.	Question	Working Step	Answer
6	$6\dfrac{5}{8} - \dfrac{7}{8}$		
7	$6\dfrac{1}{5} - \dfrac{3}{5}$		
8	$5\dfrac{7}{8} - \dfrac{3}{8}$		
9	$2\dfrac{1}{4} - \dfrac{3}{4}$		
10	$4\dfrac{2}{5} - \dfrac{4}{5}$		

iii) Add /subtract mixed number with Proper Fractions(Different denominator):

No.	Question	Working Step	Answer
1	$5\dfrac{7}{8} + \dfrac{1}{2}$		
2	$2\dfrac{2}{3} + \dfrac{1}{4}$		
3	$\dfrac{1}{3} + 1\dfrac{4}{5}$		
4	$\dfrac{1}{2} + 6\dfrac{5}{7}$		
5	$\dfrac{1}{4} + 4\dfrac{8}{9}$		
6	$6\dfrac{5}{8} - \dfrac{1}{2}$		
7	$6\dfrac{1}{5} - \dfrac{3}{4}$		

8	$5\dfrac{7}{8} - \dfrac{1}{10}$		
9	$2\dfrac{1}{4} - \dfrac{2}{5}$		
10	$4\dfrac{2}{5} - \dfrac{1}{3}$		

iv) Add / subtract mixed number with mixed numbers (Different denominator) :

No.	Question		Answer
1	$5\dfrac{7}{8} + 4\dfrac{1}{2}$		
2	$2\dfrac{2}{3} + 2\dfrac{1}{4}$		
3	$3\dfrac{2}{5} + 1\dfrac{1}{4}$		
4	$4\dfrac{3}{7} + 6\dfrac{1}{3}$		
5	$5\dfrac{4}{9} + 4\dfrac{2}{3}$		
6	$6\dfrac{5}{8} + 3\dfrac{1}{6}$		
7	$2\dfrac{6}{7} + 8\dfrac{1}{2}$		
8	$7\dfrac{4}{5} + 2\dfrac{3}{4}$		
9	$3\dfrac{1}{3} + 1\dfrac{2}{5}$		
10	$3\dfrac{1}{4} + 2\dfrac{6}{7}$		
11	$3\dfrac{1}{3} - 1\dfrac{2}{5}$		
12	$3\dfrac{1}{4} - 2\dfrac{1}{3}$		

13	$2\frac{2}{5} - 1\frac{1}{4}$		
14	$2\frac{1}{6} - 1\frac{1}{3}$		
15	$4\frac{3}{7} - 2\frac{2}{3}$		
16	$4\frac{3}{8} - 1\frac{1}{7}$		
17	$5\frac{2}{9} - 2\frac{3}{4}$		
18	$2\frac{1}{2} - 1\frac{1}{4}$		
19	$2\frac{1}{6} - 1\frac{1}{5}$		
20	$4\frac{3}{7} - 2\frac{2}{3}$		

2.6)

i) Multiply proper fraction with whole numbers :

Example : $\frac{2}{3}$ of 4812 $= \frac{2}{3} \times \overset{1\,604}{\cancel{4812}}$ $= 2 \times 1604$ $= 3\,208$	1. $\frac{3}{4}$ of 648	3. $\frac{5}{8}$ of 4816
3. $\frac{3}{5}$ of 3600	4. $\frac{1}{6}$ of 3144	5. $\frac{2}{7}$ of 2359
6. $\frac{2}{9}$ of 4851	7. $\frac{7}{8}$ of 1344	8. $\frac{2}{5}$ of 1040

ii) Multiply proper fraction with certain value of measurement(Unit conversion)

Example: $\frac{2}{3}$ of 4.5 ℓ Unit conversion 4.5 ℓ = 4500 mℓ $\frac{2}{3}$ of 4500 mℓ $= \frac{2}{3} \times$ 4500 mℓ = 2 × 1500 mℓ = 3000 mℓ	1. $\frac{3}{4}$ × 6.7 km	3. $\frac{5}{8}$ × 4.8 kg
3. $\frac{3}{5}$ × 3.6 m	4. $\frac{1}{6}$ × 2.16kg	5. $\frac{2}{7}$ × 2.1 ℓ
6. $\frac{2}{9}$ × 4.5 km	7. $\frac{7}{8}$ × 2.4 kg	8. $\frac{2}{5}$ × 1.04 ℓ

iii) Dividing fraction by fraction

Exercises

1	$\frac{1}{2} \div \frac{1}{4} =$	6	$\frac{1}{4} \div \frac{2}{5} =$
2	$\frac{2}{3} \div \frac{2}{7} =$	7	$\frac{1}{7} \div \frac{1}{5} =$
3	$\frac{2}{5} \div \frac{1}{5} =$	8	$\frac{2}{5} \div \frac{1}{7} =$
4	$\frac{3}{7} \div \frac{1}{4} =$	9	$\frac{1}{9} \div \frac{2}{5} =$
5	$\frac{5}{6} \div \frac{1}{3} =$	10	$\frac{1}{6} \div \frac{1}{5} =$

iv) Dividing fraction by whole number

Exercises

1	$\dfrac{3}{4} \div 6 =$	6	$\dfrac{1}{9} \div 9 =$
2	$\dfrac{1}{5} \div 4 =$	7	$\dfrac{3}{7} \div 8 =$
3	$\dfrac{3}{4} \div 20 =$	8	$\dfrac{3}{8} \div 4 =$
4	$\dfrac{5}{6} \div 10 =$	9	$\dfrac{3}{4} \div 12 =$
5	$\dfrac{1}{5} \div 12 =$	10	$\dfrac{3}{10} \div 6 =$

2.8)   Problem solving in daily situation :

Contoh Yap has 50 marbles. $\frac{2}{5}$ of them are yellow, 16 are black and the rest are blue. How many marbles are blue? $\qquad = \frac{3}{5} \times 50$ $\qquad = 30 - 16$ Blue marbles $= 14$	1. $\frac{4}{5}$ of 30 boys wear spectacles. How many of them wear spectacles?
2. $\frac{3}{8}$ of 40 pupils in a classroom are boys. How many of them in the classroom are boys?	3. $\frac{2}{7}$ of 42 cars are Kancil. Find the total of Kancil?
4. $\frac{3}{8}$ of 32 pupils go to school by bus. How many pupils go to school by bus?	5. There are 32 candidates in an examination. $\frac{3}{8}$ of them had failed. How many of them failed?

6. There are 45 chairs in a hall. $\frac{3}{8}$ of them are plastic chairs. Find the total of plastic chairs?	7. $\frac{4}{5}$ of 30 boys wear spectacles. How many of them are not wearing spectacles?
8. $\frac{2}{7}$ of 42 cars are Kancil. The rest are Iswara . How many Iswara are there?	9. There are 32 candidates in an examination. $\frac{3}{8}$ of of them failed. Find the total of them passed?
10. There are 45 chairs in a hall. $\frac{3}{8}$ of them are plastic chairs. The rest are wooden chair. What is the number of wooden chairs?	11. $\frac{3}{8}$ of 32 pupils go to school by bus while the others walk to school.. How many of them walk to school?