

GRADE 10 ESSENTIAL UNIT X – MULTIPLY MIXED NUMBERS

Name:_____ Date:

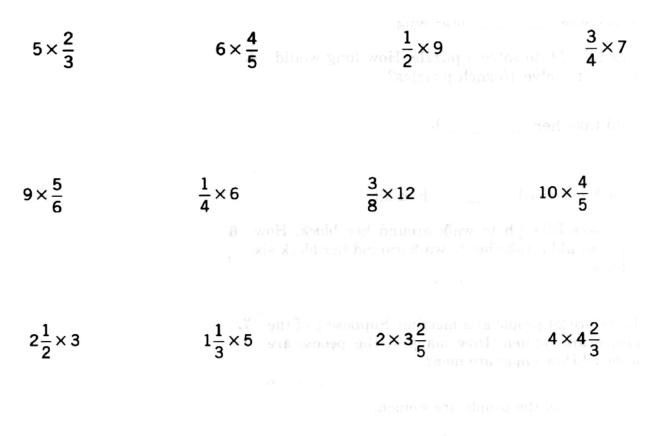
LESSON 11 – MULTIPLY MIXED NUMBERS BY WHOLE NUMBERS

Convert the mixed numbers into '*pure*' improper fractions, then follow the multiply process; straight across the top, straight across the bottom, simplify!

Demonstration:

$4\times\frac{5}{6}=\frac{4}{1}\times\frac{5}{6}$	Rename whole numbers and mixed numerals as fractions	$4\frac{2}{3}\times5=\frac{14}{3}\times\frac{5}{1}$
$=\frac{4\times5}{1\times6}$	Multiply the fractions.	$=\frac{14\times5}{3\times1}$
$=\frac{20}{6}$	Change to simplest form.	70
$=3\frac{1}{3}$		$=23\frac{1}{3}$

Write each answer in simplest form

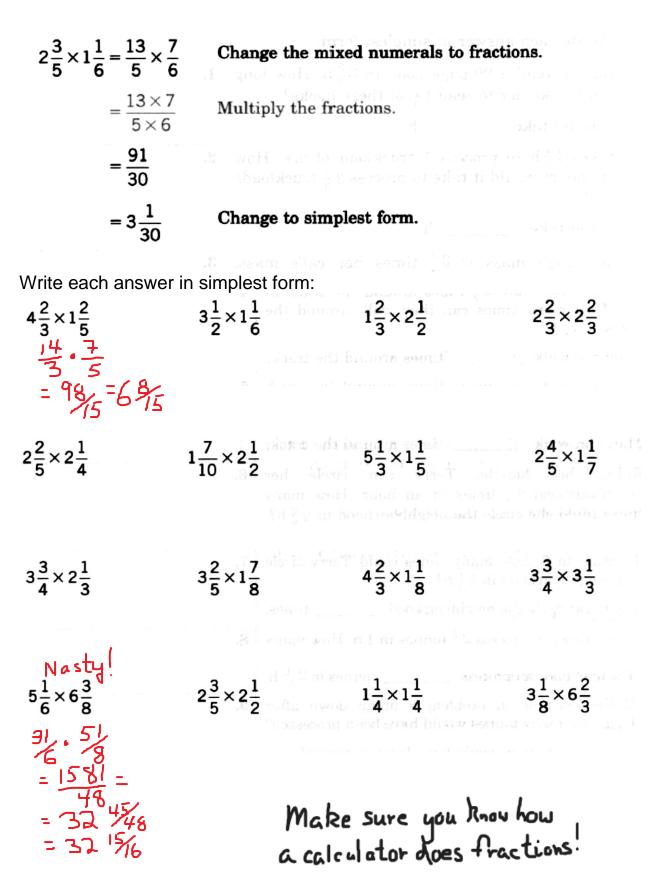




PROBLEM SOLVE. Write each answer in simplest form

1. In a class of 30, $\frac{2}{3}$ of the people have brown hair. How many people in the class have brown hair?	1. 92 d ,
people have brown hair.	
2. A plumber expects a job to take 10 h. The plumber has already worked $\frac{4}{5}$ of that time. How many hours has the plumber worked?	2. PadD
3. In a relay, 12 students ran $\frac{7}{8}$ of a lap around the track. How long was the relay?	3. In 161 Insignation of the
The relay was laps long.	6 8
4. It takes Lily $\frac{5}{8}$ h to solve a puzzle. How long would it take her to solve 15 such puzzles?	4.
It would take her h.	
5. Mark practised the piano for $\frac{3}{4}$ h on each of four days. How many hours did he practise in all?	5.
Mark practised h in all.	Ú * ÷
6. It takes Ella $\frac{1}{4}$ h to walk around her block. How long would it take her to walk around her block six times?	6.
It would take her h.	

LESSON 12 MULTIPLY MIXED NUMBERS BY MIXED NUMBERS



3

Mr/S	4		
Problem Solving. Solve each problem, write the solution in simplest form			
1. Anna can read a 90-page book in $2\frac{2}{3}$ h. How long would it take her to read $1\frac{1}{3}$ of these books?	1.		
She would takeh.			
2. It takes $1\frac{4}{5}$ h to process 1 truckload of ore. How many hours would it take to process $3\frac{1}{3}$ truckloads of ore?	2.		
It would take h.	2 <u>-</u> 8 - 06 -		
3. June's dog's mass is $3\frac{3}{4}$ times her cat's mass. June's mass is $3\frac{1}{2}$ times her dog's mass. How many times her cat's mass is June's mass?	3.		
June's mass is times her cat's mass.	nuoj seeldunes (
4. The boys can walk $6\frac{1}{2}$ times around the track in	4.		
1 h. How many times can they walk around the track in $1\frac{1}{6}$ h?			
They can walk times around the track.			
5. In problem 4, how many times around the track can the boys walk in $3\frac{1}{2}h$?	5.		
They can walk times around the track.			
6. Riding her bicycle, Terry can circle her neighbourhood $9\frac{1}{2}$ times in an hour. How many times could she circle the neighbourhood in $2\frac{2}{3}$ h?	6.		
She could circle the neighbourhood times.			
7. In problem 6, how many times could Terry circle her neighbourhood in $3\frac{1}{4}$ h?	7.		
She could circle the neighbourhood times.			
8. A machine can process $2\frac{1}{2}$ tonnes in 1 h. How many tonnes can the machine process in $2\frac{1}{10}$ h?	8.		
The machine can process tonnes in $2\frac{1}{10}$ h.			
9. If the machine in problem 8 broke down after $1\frac{1}{2}h$, how many tonnes would have been processed?	9.		
tonnes would have been processed.			