FORM ONE TERM ONE EXAMS 2017

MATHEMATICS

TIME: 2 ½ HOURS
FORM ONE

1. Write 27707807 in words.   (2mks)

2. Use either <,> or = to relate the fractions below.

   a) $^2/_4$ and $^3/_6$ (1mk)

   b) $^{60}/_{25}$ and $^{60}/_{132}$ (1mk)

3. State the place values of the following digits in the number 201.789.

   a) 1   (1mk)

   b) 8   (1mk)

   c) 7   (1mk)
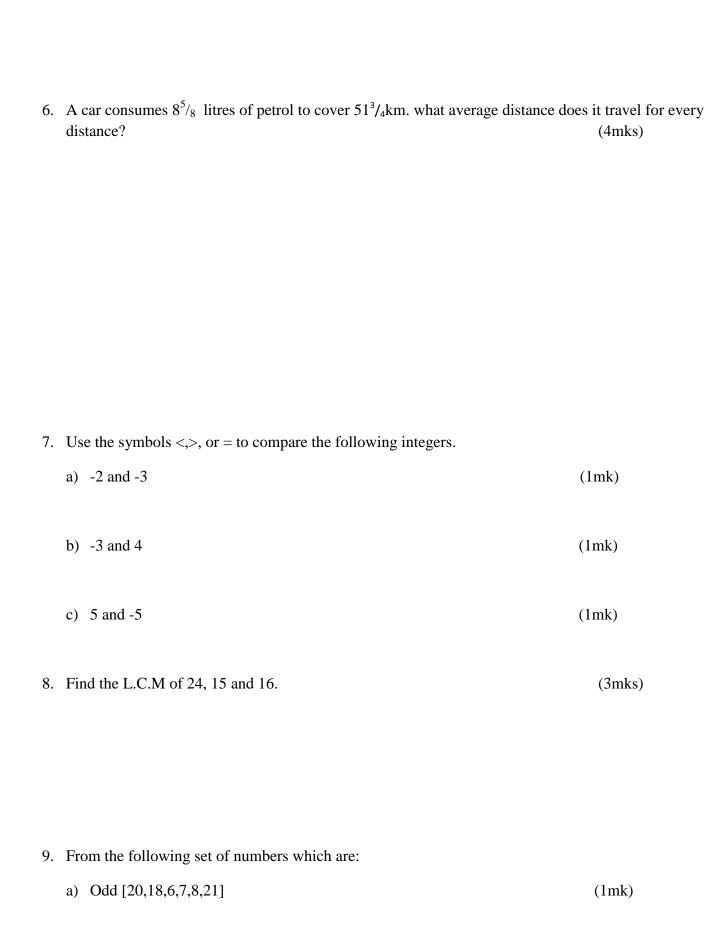
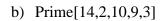4. Use factor-tree to decompose   256 into prime factors.   (4mks)

5. Evaluate $\left\{\left(1\frac{1}{4} - \frac{3}{8}\right) \div 2\frac{1}{2} + 1\frac{3}{4} \div 1\frac{1}{4}\right\}$ (3mks)

6. A car consumes $8^5/_8$ litres of petrol to cover $51^3/_4$km. what average distance does it travel for every distance? (4mks)

7. Use the symbols <,>, or = to compare the following integers.

   a) -2 and -3 (1mk)

   b) -3 and 4 (1mk)

   c) 5 and -5 (1mk)

8. Find the L.C.M of 24, 15 and 16. (3mks)

9. From the following set of numbers which are:

   a) Odd [20,18,6,7,8,21] (1mk)

b) Prime[14,2,10,9,3]   (1mk)

10. Convert the following fractions into percentages:

a) $\dfrac{3}{4}$ (2mks)

b) $\dfrac{1}{4}$ (2mks)

11. What is the G.C.D of 60, 80 and 120?   (3mks)

12. What fraction does letter K represent in the diagram below? (3mks)

K	L	L	L	K
L	K	K	L	W
L	L	L	K	L
L	K	L	L	L

13. Write in figures five billion five million five thousand and five.   (2mks)

14. The sum of two consecutive even numbers is 74, find the two numbers.   (4mks)

15. Write the following into improper fraction:

a) $1^3/_4$ (2mks)

b) $2^6/_7$ (2mks)

16. Use a number line to perform the following operations.

a) (-10)-(-3)   (1mk)
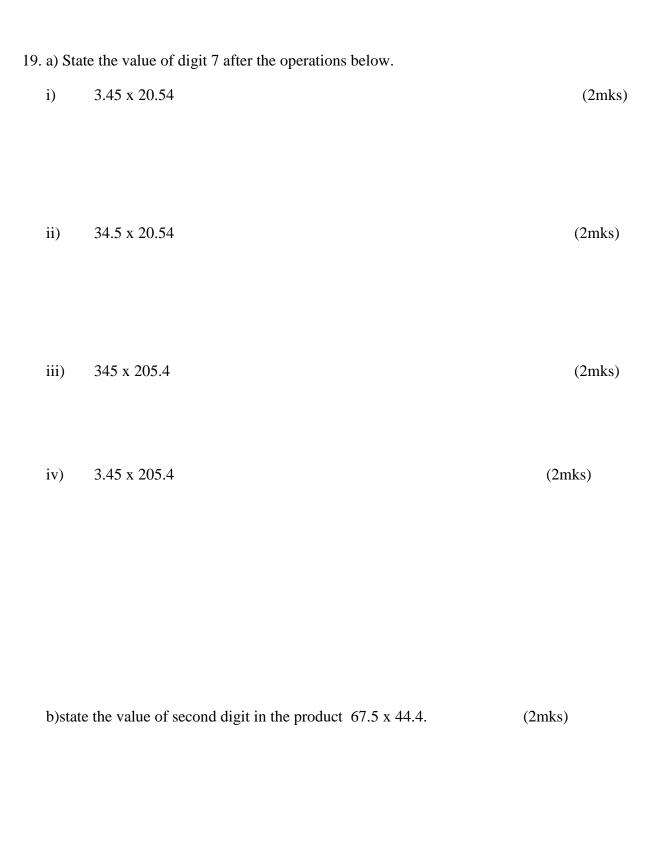
b) (-3)-(-4)   (1mk)

c) (+1)-(-8)   (1mk)

17. a) A two digit number is such that the ones digit is $1\frac{1}{4}$ times greater than the tens digit. If the sum of the digits is 9, find the number.   (6mks)

    b) find the product of the positive difference and the maximum quotient between the digits. (4mks)

18. Three bells ring at intervals of 6 minutes,5 minutes and 8 minutes. If they rang first at 9.15 a.m, find when they will ring for:

    a) The second time   (6mks)

    b) The 5th time   (4mks)

19. a) State the value of digit 7 after the operations below.

    i)   3.45 x 20.54   (2mks)

    ii)   34.5 x 20.54   (2mks)

    iii)   345 x 205.4   (2mks)

    iv)   3.45 x 205.4   (2mks)

    b) state the value of second digit in the product 67.5 x 44.4.   (2mks)

20. a) When a number is divided into by 8,9,and 6 the remainders are 7, 8 and 5 respectively. Find the number.   (6mks)

b)The L.C.M of three numbers is 24 and their G.C.D is 4. If two of the numbers are 8 and , find the other number.   (4mks)

21. check whether the following numbers are divisible by 6:

a) 390   (2mks)

b) 441   (2mks)

c) 6732   (2mks)

d) 7544   (2mks)

e) 5310   (2mks)

22. Express the following numbers in powers of their prime factors:

   a) 196   (2mks)

   b) 72   (2mks)

   c) 385   (2mks)

   d) 300   (2mks)

   e) 715   (2mks)

23. Three boys shared some money. The youngest got $^1/_{12}$ of it, the next got $^1/_9$ and the eldest got the remainder.

   a) What fraction of the money did the eldest receive?   (6mks)

   b) If the eldest boy got shs. 330, what was the original sum of money?   (4mks)

24. Round off the following numbers to the nearest values indicated in the brackets,

a) 370   (1000)   (2mks)

b) 2499   (10)   (2mks)

c) 38679   (10000)   (2mks)

d) 473678   (100)   (2mks)

e) 501   (1000)   (2mks)