GRADE: 8
SUBJECT: MATHEMATICS
TERM THREE
FORMAL ASSESSMENT TASK – ASSIGNMENT
2015

Name: _____

Class: _____ Date: _____

School: _____ Teacher:_____

FAT	Activity/Form	Learner's mark	Learner's %
3.1	Assignment		
TOTAL		**60**	

Question 1

1.1 Write as a fraction in simplified form (show working):

1.1.1 85% (1)

1.1.2 0,625 (1)

1.2 Arrange in ascending order:

$\frac{31}{40}; 78\%; 0,7$ (2)

1.3 Write $400\,m$ out of $5\,km$ as a percentage. (3)

1.4 Keenan got $\frac{13}{25}$ for his Mathematics test.

1.4.1 Write down two equivalent fractions for this mark (2)

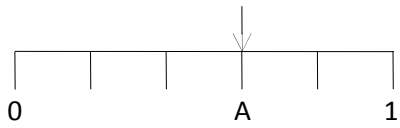
1.4.2 Write this fraction as a decimal fraction. (1)

1.4.3 If the pass percentage for a Mathematics class test is 40%, did Keenan pass this test and what was his percentage? (2)

[12]

Question 2

1.5 Determine the value of the letters A to D in decimal form.



B C D

(4)

1.6 Calculate without the use of a calculator:

1.6.1 $7,5+0,75+0,075+75$ (2)

1.6.2 $14,4 \div 0,12$ (3)

1.6.3 $\sqrt[3]{0,001}$ (2)

1.6.4 $(-0,4)^3$ (2)

1.7 1 kilobyte of data takes 0,005 seconds to download from the internet.



1.7.1 How long does it take to download 7 kilobyte? (2)

1.7.2 How many kilobytes can be downloaded in a $\frac{1}{2}$ minute? (3)

[18]

Question 3

1.8 Complete the following by filling in the missing value in the blocks.

$$1\frac{2}{3}+2\frac{1}{4}\times\frac{4}{15}¿\frac{\square}{3}+\frac{9}{\square}\times\frac{4}{15}¿\frac{\square}{3}+\left(\frac{\square}{\square}\right)¿\frac{+¿}{\square}¿¿\frac{\square}{\square}=\ldots$$

(5)

1.9 Calculate: (**do not use a calculator and show all working)**

$$1\frac{1}{2}+\frac{1}{4}\div\frac{3}{2}$$ (5)

1.10 Thandu is an athlete. During a practice session, he completes one lap of a track in an average time of $3\frac{1}{5}$ minutes.

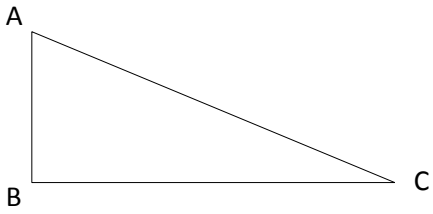
1.10.1 How long does he take to complete 4 laps? (2)

1.10.2 During a race, he completes one lap in only $\frac{5}{8}of\,3\frac{1}{5}$ minutes. If he maintains this speed, how long will it take him to complete the race over 6 laps. (2)

[14]

Question 4

1.11 Refer to the sketch and complete the sentences below:



1.11.1 If $b^2=a^2+c^2$, then ΔABC is a ..... triangle and $\hat{B}=¿$ .....°. (2)

1.11.2 Hence,

(a) $c^2=¿$.....

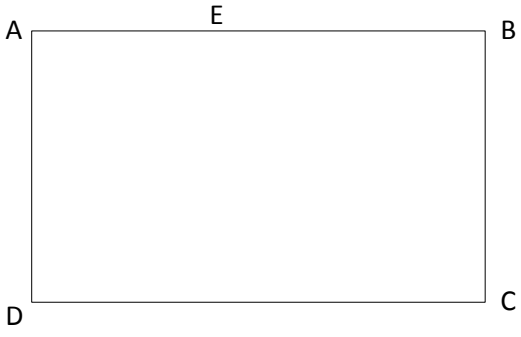
(b) $\sqrt{b^2-c^2}$ = ... (2)

1.12 Find the length of the unknown side.

1.12.1 4.2.2

(3) (3)

1.13 ABCD below is a rectangle with $AD=24\,mm$, $DE=25\,mm$ and $CE=26\,mm$.



1.13.1 Determine the length of AE. (2)

1.13.2 Determine the length of AB. (4)

[16]

TOTAL: 60