PRIMARY SCHOOL

MATHEMATICS GRADE 7

**TERM 1: TASK 2**

EXAMINER: FA: TEST

MODERATOR:

TIME: 2 HOURS ASSESSMENT TOOL: MEMORANDUM

MARKS: \_\_\_\_\_\_/ 100

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Level 1  0 – 29%  Not Achieved | Level 2  30 – 39%  Elementary achievement | Level 3  40 – 49%  Moderate achievement | Level 4  50 – 59%  Adequate achievement | Level 5  60 – 69%  Substantial achievement | Level 6  70 – 79%  Meritorious  achievement | Level 7  80 – 100%  Outstanding  achievement |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_ Grade 7 \_\_ No \_\_

**SECTION A**

MULTIPLE CHOICE

Circle the letter of the correct answer. Only one answer is correct.

1. 160 ÷ 8 equals

a) 20 b) 2 c) 200 d) 2 000

2. Round off 2 897 to the nearest 100

a) 2 800 b) 2 900 c) 2 890 d) 2 895

3. equals

a) 600 b) 650 c) 25 d) 2

4. The next number in the sequence is 11 347 ; 10 847 ; 10 347 ; ……

a) 9 847 b) 10 097 c) 9 597 d) 9 347

5. The LCM of 4 ; 12 ; 18 ; 36.

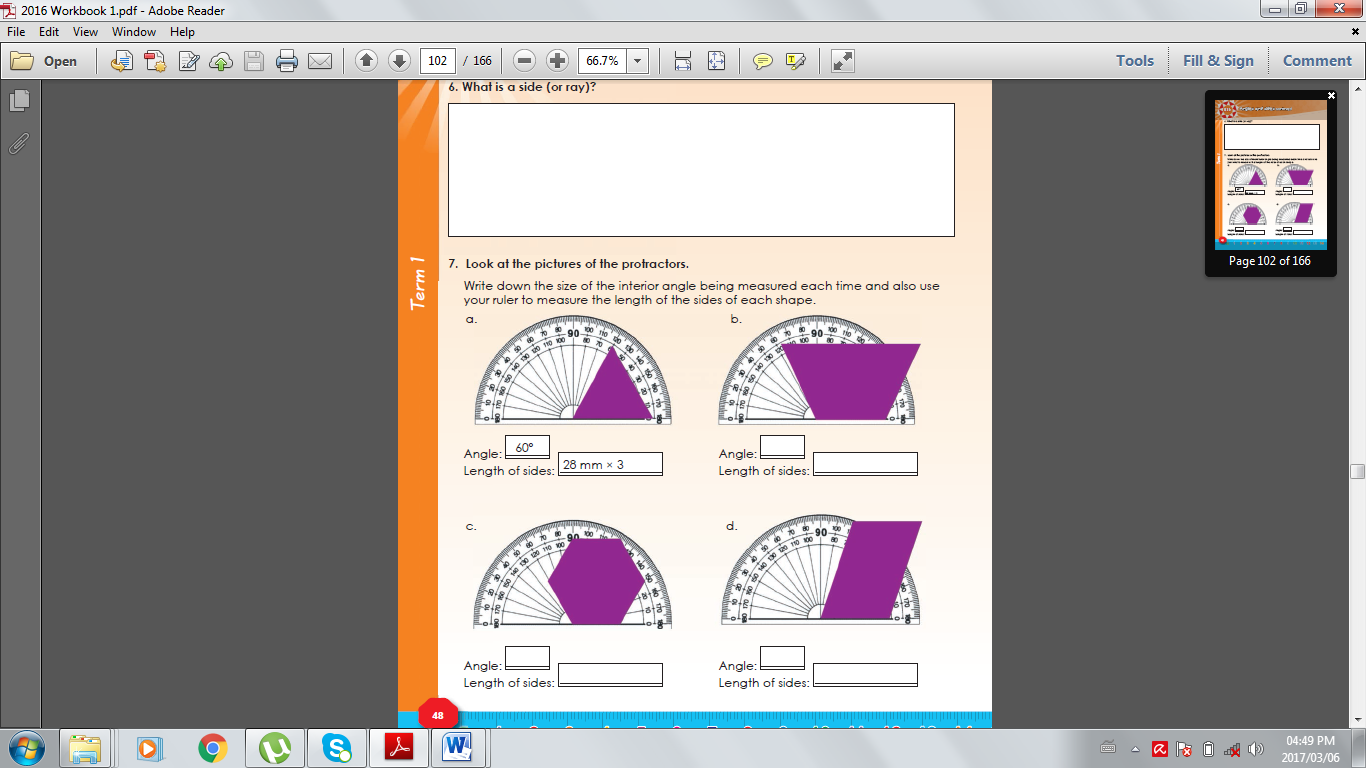
a) 4 b) 12 c) 18 d) 36

6. 5% discount on R3 960

a) 396 b) 500 c) 100 d) 198

7. The circumference is the outline of a

a) quadrilateral b) triangle c) circle d) square

8. The size of the interior angle

a) 62

b) 122

c) 150

d) 90

9. The name of a 145 angle

a) reflex angle b) obtuse angle c) acute angle d) straight angle

10. Twelve teams participated in a netball tournament. Each team played every other team once. How many games were played altogether?

a) 24 b) 66 c) 144 d) 132

[10]

**SECTION B**

WHOLE NUMBERS

1. Arrange and draw the following numbers in ascending order on the number line:

241 782 ; 242 342 ; 241 699 ; 241 571 ; 242 102; 241 999.

l-------------------------------------------------------------------------------------------------------------------l

1. What is the smallest number? **241 571**  (1)
2. What is the biggest number? **242 342**  (1)
3. What is the difference between the two numbers?

**242 342 – 241 571 = 771** (1)

1. What is the sum of the second and the fourth number on this number line?

**241 699 + 241 999 = 483 698** (1)

1. What is halfway between the third and the fifth interval on the number line?

**242 102 – 241 782 → 320 ÷ 2 → 160 + 241 782 = 241 942** (1)

2. 2.1 Write down the factors of 8 **1; 2; 4; 8** (1)

2.2 Give the first 4 multiples of 7 **7; 14; 21; 28**  (1)

2.3 Write down the prime factors of 108 **2 ; 3** (1)

2.4 What is the LCM of 12 and 15? **60** (1)

2.5 What is the HCF of 28 and 21? **7** (1)

3. Calculate the following:

3.1 452, 13 + 43, 40 + 1 624, 35 3.2 678 453, 6 – 5 626, 54

**452 , 13 678 453 , 60**

**43 , 40 - 5 626 , 54**

**1 624 , 35 672 827 , 06 (2)**

**2 119 , 88** (2)

3.3 463 x 242 3.4 10 608 ÷ 34

463 312

X 243 34 l 10 608

926 -102

18 520 40

92 600 - 34

112 046 (4) 68

- 68 (4)

0

3.5 24 852 ÷ 4

**6 213** (1)

4. 4.1 Use the commutative property of addition and multiplication to make the following

statements true.

1. 128 + 456 **456 + 128** (1)
2. 7(12 x 5) **( 12 x 5 ) 7**  (1)

4.2 Use the distributive property of multiplication to make the following statements true.

1. 8(4 – 3) **8 x 4 – 8 x 3** (1)
2. 5 x 24 + 5 x 13 **5( 24 + 13 )** (1)

5. 5.1 = **16** 5.2 8 = **2 x 2 x 2**

5.3 = **216** 5.4 9 + = **1009**

5.5 100 = 5.6 = **6**

5.7 4 x + 5 x = **40 500** (7)

6. Calculate the following

6.1 6.2

= **125 – 49 + 8** = **81 + 100**

= **84** (2) = **181** (2)

6.3 + = **8 – 4 + 5 = 9** (2)

7. Calculate and simplify

7.1 =  **= 9**  (2)

7.2 =  **= 16** (2)

[44]

**SECTION C**

RATIO, RATE AND FINANCE

1. There are 500 learners at Orange School. Everyone must play a winter sport.

Learners can play soccer or hockey or netball. 200 boys play soccer and 75 boys play hockey.

100 girls play netball and 125 play hockey.

1. What is the ratio of soccer players to netball players?

**200 : 100** simplifies to **2 : 1** (1)

1. What is the ratio of boys playing soccer to boys playing hockey?

**200 : 75** simplifies to **8 : 3** (1)

1. What does the ratio 3 : 5 represent?

**The ratio of boys playing hockey to girls playing hockey is**

**75 : 125 = 3 : 5** (1)

1. Stephen is making jam to sell at a food market. Look at the budget below.

Answer the questions.

|  |  |  |
| --- | --- | --- |
| For 10 jars | Expenses | Income |
| Jar | R65.00 |  |
| Sugar | R27.00 |  |
| Fruit | R90.00 |  |
| **TOTAL** |  |  |

1. What are Stephen’s total expenses for ten jars of jam?

**65 + 27 + 90 = R 182 , 00**  (1)

1. If Stephen sells all his jars of jam for R25.00 each, what will his total income be?

**10 x R 25, 00 = R 250,00** (1)

1. If Stephen sells all his jars of jam, what will his profit be?

**250 – 182 = R 68 profit** (1)

1. If Stephen only sells half of his jars of jam, what will his profit/loss be?

**5 x 25 = R 125 🡪 125 – 182 = - R 57, 00 loss** (1)

[7]

**SECTION D**

GEOMETRY

1. Write down the instructions for a friend explaining how to draw a 45 angle using a protractor. 1) Draw a line segment AB

2) Place the protractor that the centre is over point A. Rotate protractor so that the base line is on AB

3) Use the correct scale – find the . Move up to 45

4) Make a mark at the 45 angle

5) Draw a straight line from A to the mark and label this point C

6) Draw the line and label angle BC as well as the 45 angle (6)

3. 3.1 Using a ruler and a pencil, draw the following line segments.

a) PQ AB

b) Three line segments parallel to AB

A l----------------------------------------l B

(2)

(2)

3.2 Which one of the two concepts, vertical and horizontal, is applicable to the following types of sport?

a) A train moving on a rail track **Horizontal**

b) A lift moving from the 3rd to the 6th floor **Vertical**

c) Athletes running 100 metres on a track field **Horizontal**

(3)

4. Draw sketches to illustrate the following angles:

|  |  |
| --- | --- |
| An obtuse angle | A right angle |
| A straight angle | A reflex angle |

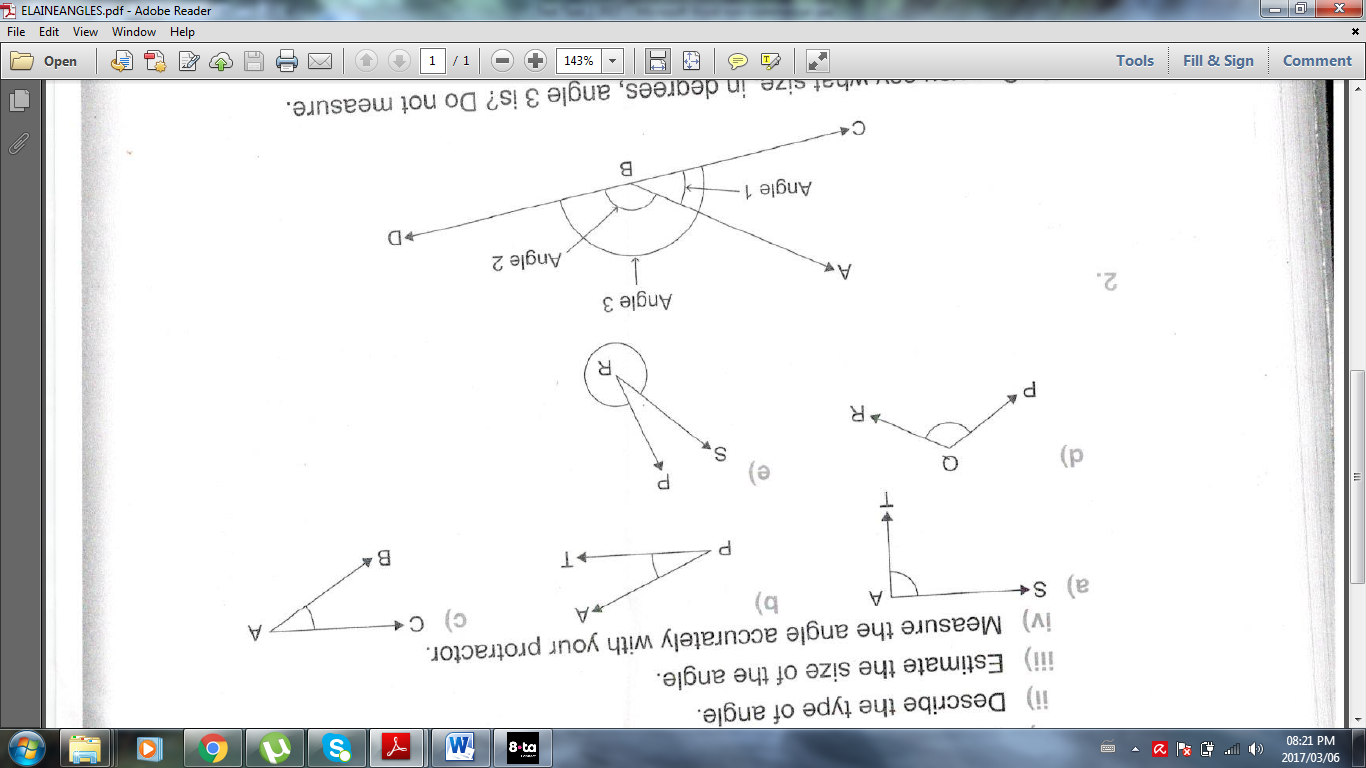
(4)

5. For each of the following:

i) Use the letters showing the name of the angle

ii) Describe the type of angle

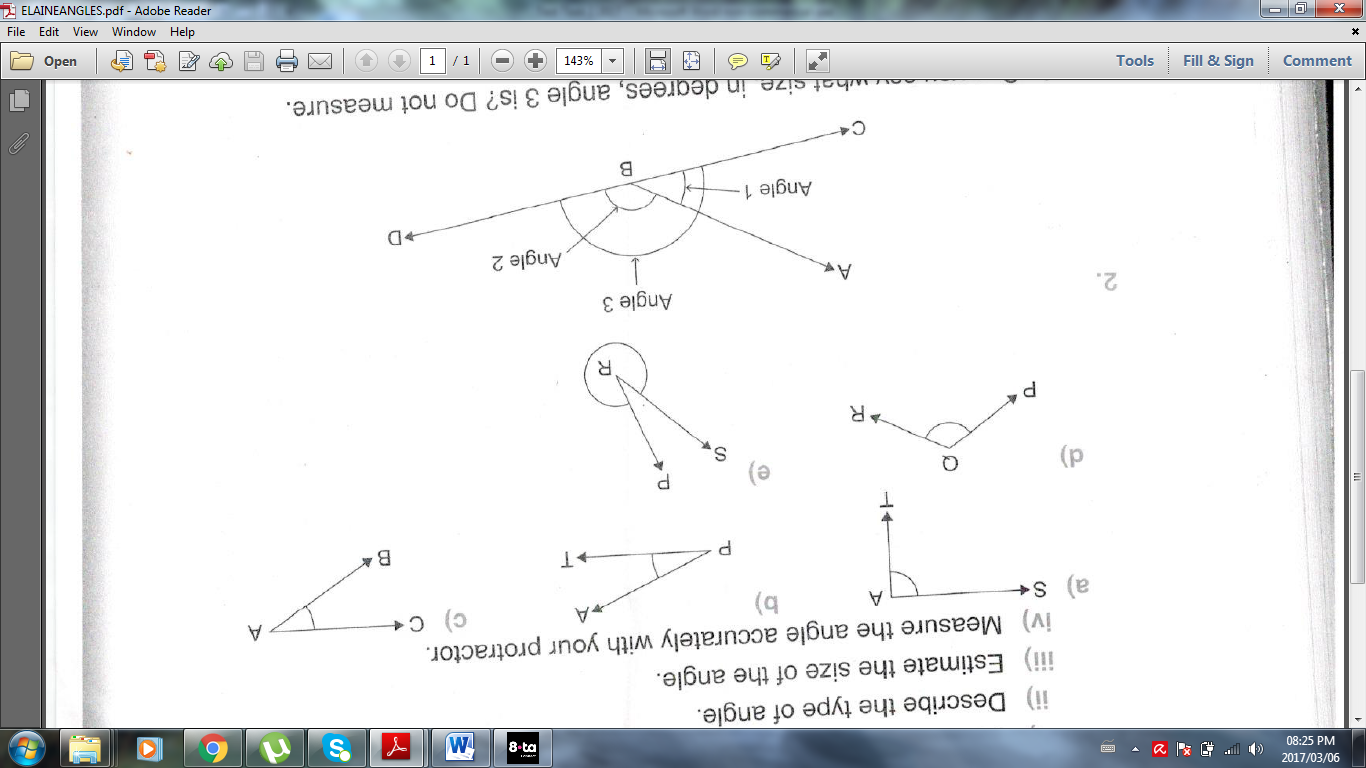
iii) Measure the angle accurately with your protractor.



5.1 i) **APT**

ii) **Acute angle**

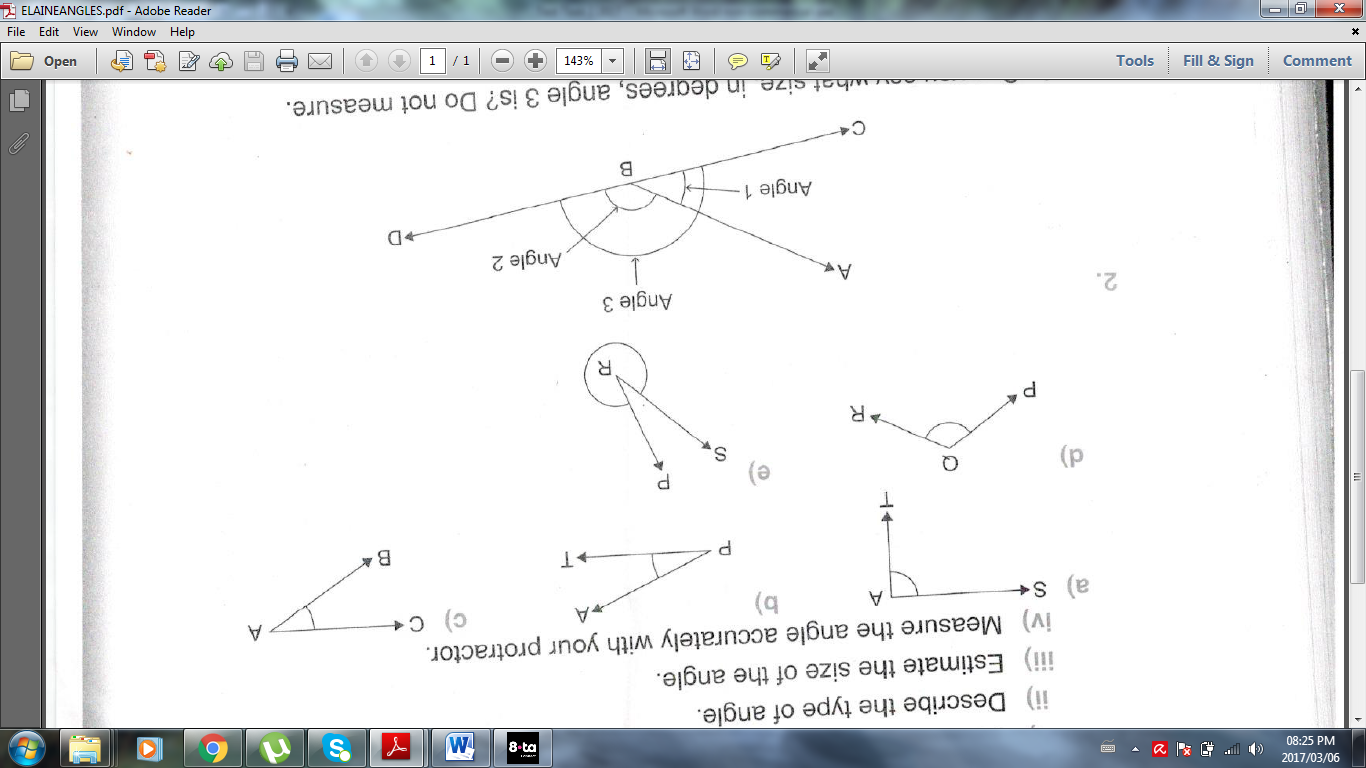
iii) **25**



5.2 i) **PQR**

ii) **Obtuse angle**

iii) **120**



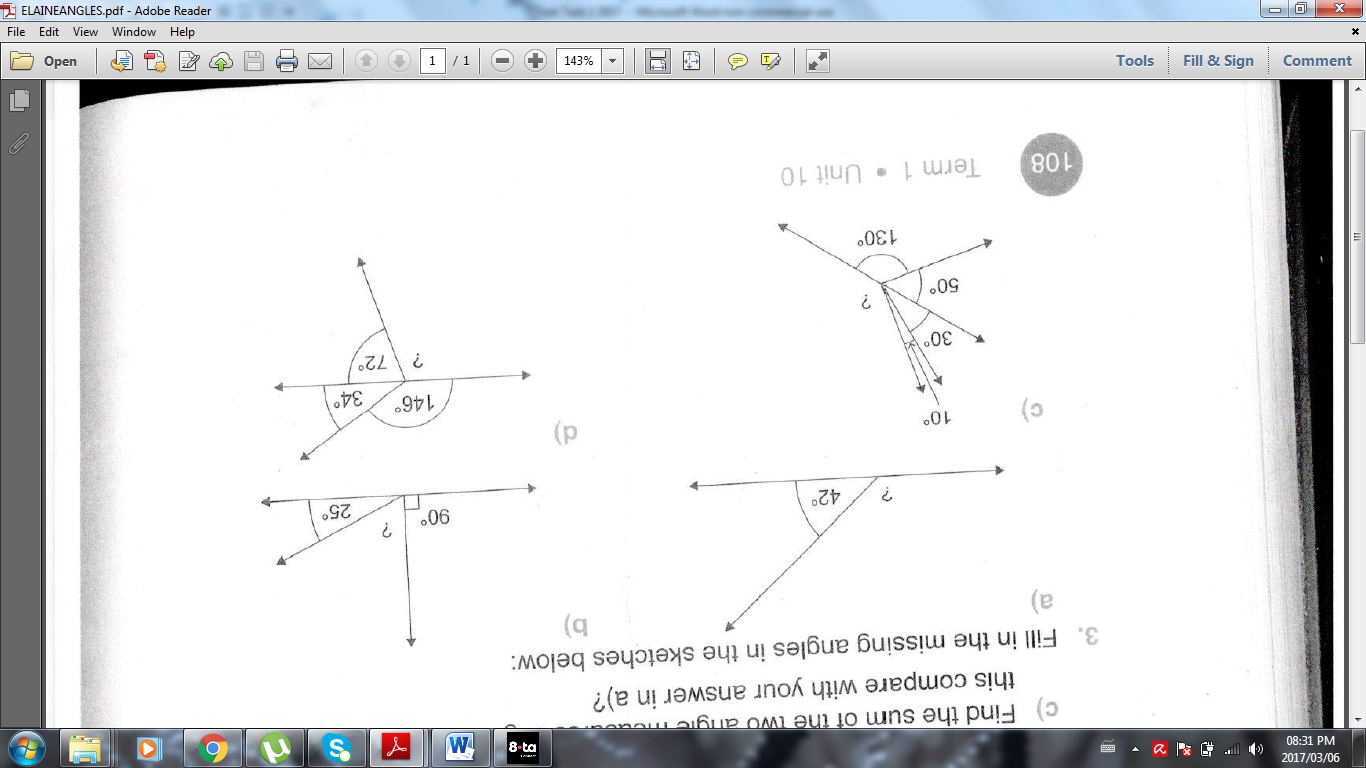
5.3 i) **SRP**

ii) **Reflex angle**

iii) **333**

(9)

6. Fill in the missing angles in the sketches below.



(4)

7.1 Construct and label a 30 angle ABC using a protractor.

(2)

7.2 Construct and label a 215 angle DEF using a protractor.

(2)

8. Draw the lines and label the circle using the following words:

diameter; chord; radius; sector; and arc

(5)

[39]

FINAL TOTAL/ 100