TOM NEWBY SCHOOL EXAMINATION

Subject	MATHEMATICS		Examiner/s	MISS KLEMP/ MR PHILLIPS/ MRS FOURIE
Date	5 June 2018		Total marks	100
Duration	2 HOURS			
Grade	7		Moderator	MRS FOURIE
Special instructions/ Equipment		1. Write your name, surname and class on the question paper and answer sheet. 2. Read through each question carefully and follow the instructions. 3. NO calculators. 4. Check the mark allocation for each question. 5. You will need to use your protractor, pencil, pen and ruler. 6. GOOD LUCK		

This assessment has been compiled using notes and information contained in the Tom Newby School resource material. The marking memorandum has been compiled accordingly. While alternative responses will be given due acknowledgement, the official memorandum will be considered a priority document to ensure uniformity of marking.

Name:	Surname:	Class:

QUESTION 1 – Multiple Choice   [13]

Write the correct letter next to the corresponding number.

1. If the distance between two lines never change, they are:

a) Perpendicular   b) Parallel

c) Intersecting lines   d) Rays   (1)

2. An isosceles triangle has:

a) Three equal sides   c) No equal sides

b) Two equal sides   d) Not a, b or c   (1)

3. 9 347 879 rounded off to the nearest 1 000 is?

a) 9 348 000   c) 9 348 300

b) 9 347 380   d) 9 350 000   (1)

4. Choose the factors of 20 from the following:

a) 1; 2; 4; 5; 10; 15; 20

b) 1; 2; 4; 5; 10; 20

c) 1; 2; 4; 8; 10; 20

d) 2; 5 (1)

5. Write $\frac{1}{40}$ as a decimal.

  a) 0,025   c) 0,04

  b) 0,25   d) 0,4 (2)

6. Write 0,45 as a percentage

  a) 0,45%   b) 4,5%

  c) 45%   d) 450% (1)

7. $4 + 6 \times 2 - 1$

a) 19   b) 15

c) 11   d) 10 (2)

8. The perimeter of a square is 36cm. The length of each side is:

a) 8cm   c) 6cm

b) 12cm   d) 9cm (1)

9. The biggest prime factor of 17 is:

a) 1   b) 17

c) 34   d) 8,5 (1)

10. $\frac{2}{3}$ of a revolution

a) 120°   c) 180°

b) 240°   d) 90° (2)

Question	1	2	3	4	5	6	7	8	9	10
Answer										

QUESTION 2   [13]

Write down the answers only.

1. What value does the digit 6 have in 329,7<u>6</u>5?

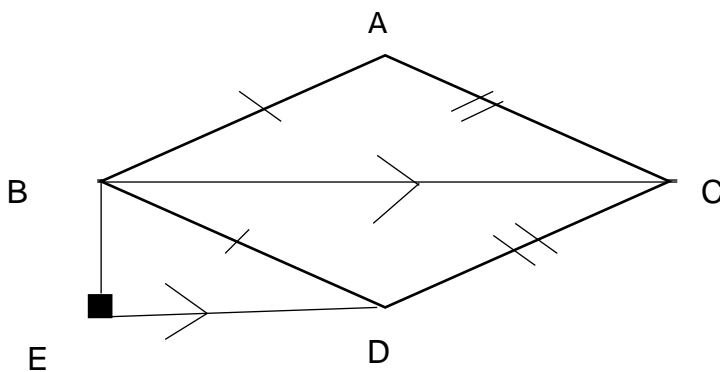   _____   (1)

2. Simplify $\frac{21}{56}$ _____   (1)

3. Use the shape below to answer the questions that follow:

    Complete by naming a line:

    a) AB =   _____   (1)

    b) BC //   _____   (1)

    c) BE ⊥ _____   (1)

4. List the composite numbers smaller than 20 that are multiples of 3.   (2)

    _____

5. What is 25% of 3 hours and 20 minutes?   (2)

    _____

    _____

6. Use your protractor to measure the size of:
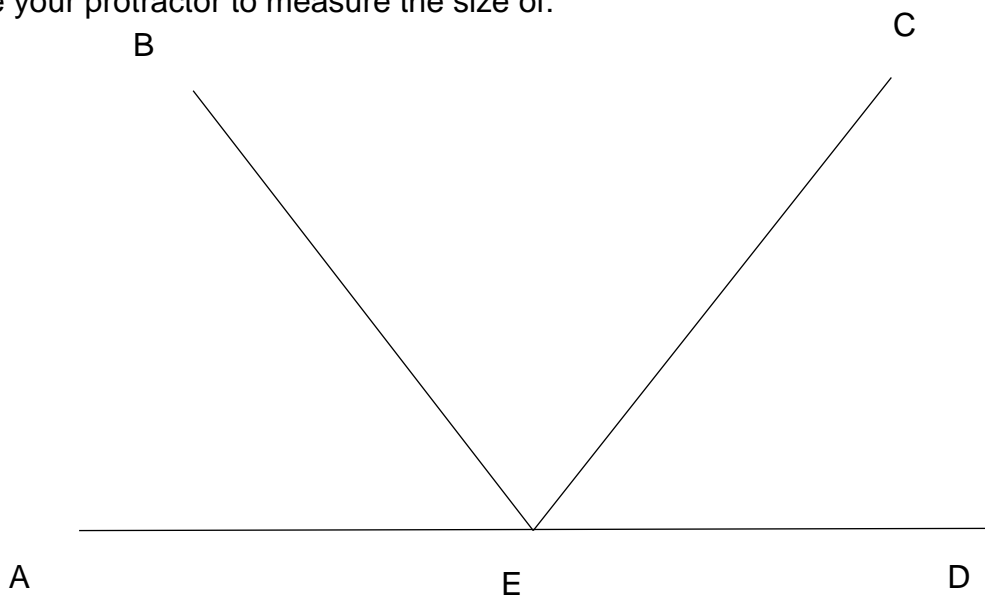
a) Angle AEB _____ (1)

b) Angle BED _____ (1)

6. Fill in <; > or =

a) $\dfrac{4}{7}$ ☐ $\dfrac{3}{4}$ _____ (1)

b) $\sqrt{121}$ ☐ $\sqrt[3]{1000}$ _____ (1)

QUESTION 3 [17]

1. Write 1 650 as the product of its prime factors. (3)

   (Use the ladder method)

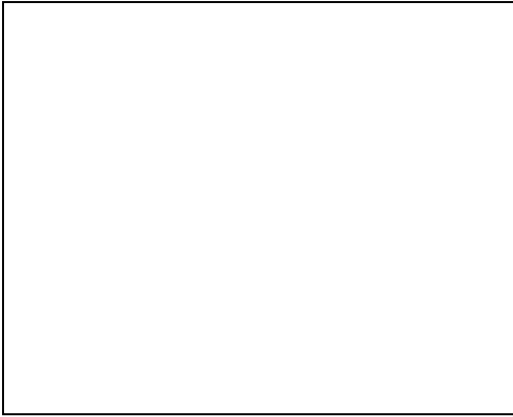   _____

2. Fill in the missing numbers in the sequence:

   $\dfrac{1}{3}$; _____; 3; 9; _____ (2)
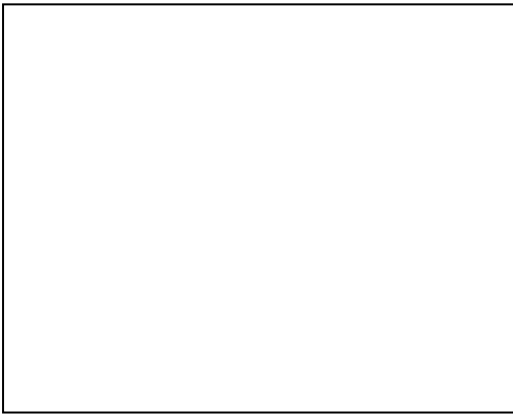
3. Simplify the following ratio

   24: 36: 60 (1)

4. $\frac{4}{5}$ x $3\frac{1}{3}$ (3)

5. 324,34 + 17,807 − 78,528 (2)

6. 0,072 ÷ 12 (1)

7. 108 Grade 7 learners watched a Soccer match. The ratio of boys to girls was 7:2. How many girls watched the match? (3)

8. A bank gives 7% interest a year. If I put R2 500 in a bank account, what amount will there be in the account after 1 year? (2)

QUESTION 4 [18]

1. Complete the table below:

	Simplified fraction	Decimal	Percentage
36 minutes of 3 hours	a	b	c
75cm of 5m	d	e	f

(6)

2. Calculate the following and write the answer in its simplest form:

a) $4\frac{1}{4} + 1\frac{2}{3} - 2\frac{1}{6}$ (3)

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

3. A company is planning a dinner for 125 people. The food is expected to cost R85 per person, and the drinks R39 per person. The cost of hiring the venue for the evening is R1 950. Calculate the total cost, for the company to host the dinner. Then calculate the cost per person. (Round off to the nearest Rand). **(6)**

QUESTION 5 [19]

1. Soccer balls cost R138,00 each. Joe wants to buy one, but he has only saved R98,55 so far. The shop is prepared to give him a 15% discount.

   a) Calculate how much the discounted price will be.

   _____
   _____
   _____
   _____

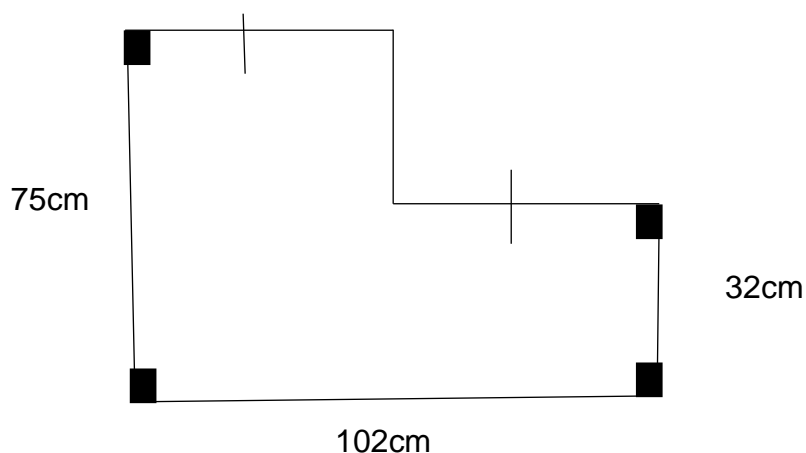   b) Does Joe have enough money? If not, how much does he still need? (4)

   _____
   _____
   _____

2. Use the shape below, to answer the questions that follow:

75cm

32cm

102cm

a) Calculate the perimeter of the shape. (2)

_____

_____

_____

b) Convert the perimeter into meters. (1)

_____

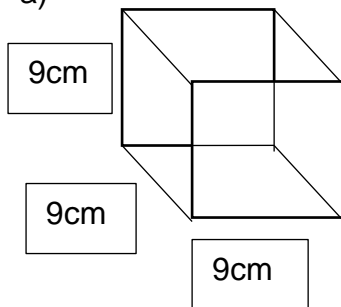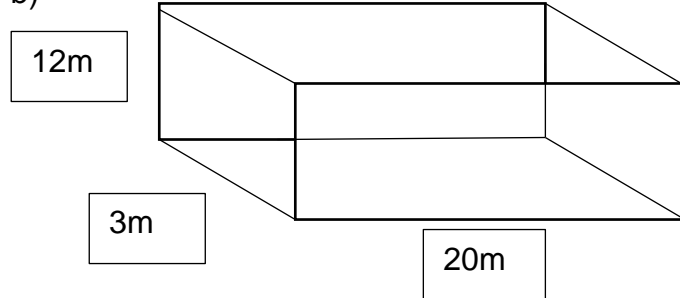c) Calculate the area of the shape. (3)

_____

_____

_____

3. Calculate the volume of the prisms:

a)

9cm

9cm

9cm

b)

12m

3m

20m

c)

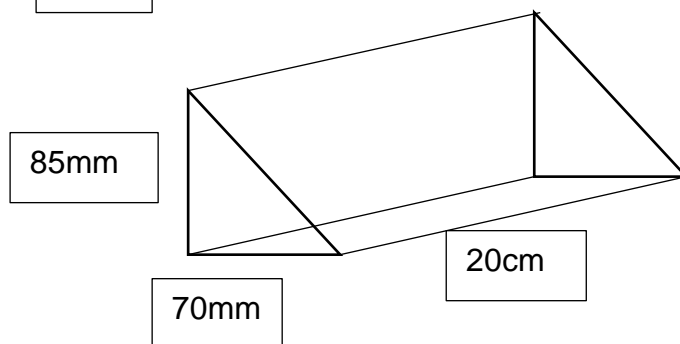85mm

70mm

20cm

a)	b)	c)

(3 x 3 = 9)

QUESTION 6 – (Show ALL calculations.)   **[20]**

1. What number must be added to 23 489 to get 32 530?   (2)

_____

_____

_____

2. What number exceeds 72 409 by 27 326?   (2)

_____

_____

_____

3. $20^2 - (\sqrt[3]{125} \times 62)$ (3)

_____

_____

_____

_____

4. Use your protractor and ruler:

a) Construct   A△C with AB = 80mm; Angle ABC = 50° and BC = 65mm.   (4)
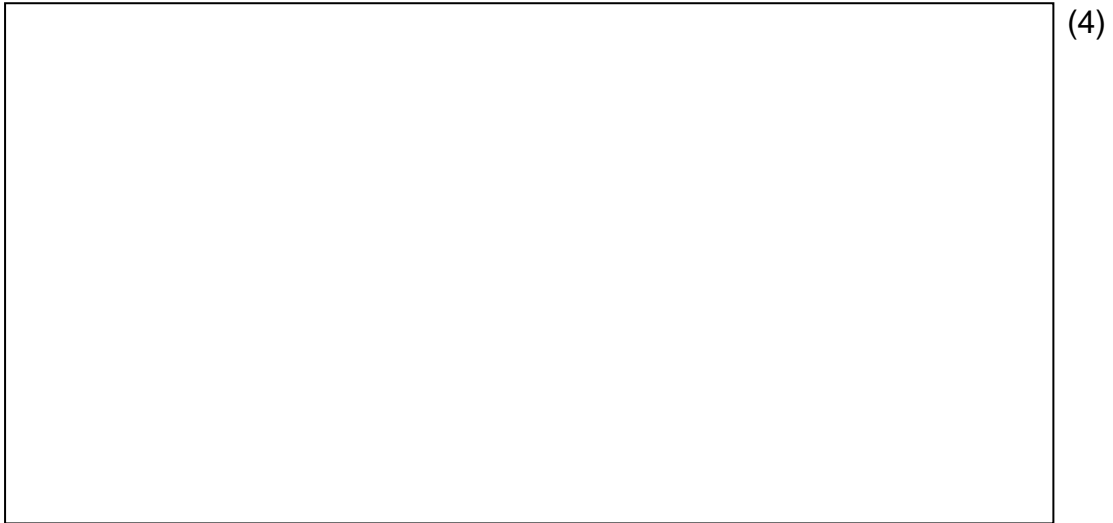
b) Measure angle ACB   _____   (1)

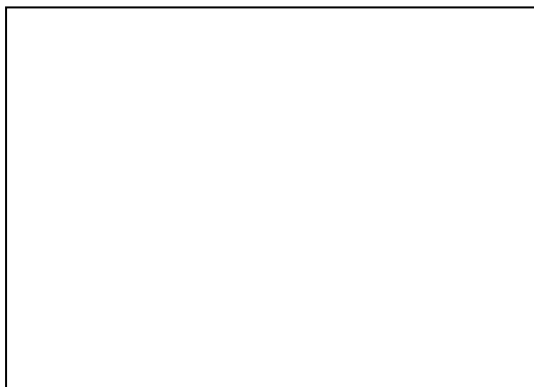5. Calculate the answer. Show ALL working out.

2,79 x 7,5   (3)

6. Romy competed in a cross country race of 15km. She completed only $\frac{2}{5}$ of the race.

What distance did Romy run?   (1)

7. To open a coke bottle you have to turn the top 3 full turns.

   a) Through how many degrees do you have to turn the top in order to open the bottle? (2)

   b) What fraction would 270° be of the total number of degrees the top has to rotate in order to open the bottle? (2)

Total: 100