DONJAY ACADEMY NURSERY, PRIMARY AND SECONDARY SCHOOL

THIRD TERM EXAMINATION (2022 SESSION)

SUBJECT: MATHEMATICS CLASS: JSS1 SECTION A

1. The basic unit for volume is \_\_\_\_\_\_\_\_\_\_ (a) cm3 (b) mm3 (c) m3  (d) litre
2. Alternate angles are said to be \_\_\_\_\_\_\_\_\_\_ (a) equal (b) parallel (c) corresponding (d) different
3. \_\_\_\_\_\_\_\_\_\_ of a solid is a measure of the space it takes up (a) permiter (b) volume (c) measurement (d) container
4. The basic unit of capacity is \_\_\_\_\_\_\_\_\_\_ (a) litre (b) kiloliter (c) milliliter (d) deciliter
5. What is the sum of angles in a triangle (a) 900 (b) 2700 (c) 3600 (d) 1800
6. What is the volume of cube of side 4cm (a) 12 cm3 (b) 16 cm3 (c) 64 cm3 (d) 56 cm3
7. Sum of angles at a point is \_\_\_\_\_\_\_\_\_\_ (a) 3600 (b) 1800 (c) 2700 (d) 900
8. Vertically opposite angles are not equal (a) true (b) false (c) maybe (d) I don’t know
9. Sum of angles on a straight line is \_\_\_\_\_\_\_\_\_\_ (a) 1800 (b) 900 (c) 3600 (d) 2700

*Use the diagram below to answer questions 10 – 12*

z0

770

y0

x0

620

1. Calculate the angle lettered y0 (a) 770 (b) 410 (c) 1180 (d) 620
2. What is the angle lettered x0 (a) 770 (b) 620 (c) 1180 (d) 410
3. Calculate the angle z0 (a) 410 (b) 770 (c) 1180 (d) 620
4. When two straight lines intersect, they form \_\_\_\_\_\_\_\_\_\_ number of angles (a) 2 (b) 4 (c) 6 (d) 8
5. Find the size of the lettered angle below (a) 1300 (b) 1800 (c) 2200 (d) 500

500

a0

1. What is the size of the angle lettered f0. (a) 1000 (b) 1900 (c) 700 (d)1200

1200

1200

F0

1. \_\_\_\_\_\_\_\_\_\_ is the outside boundary or edge of a plane shape (a) measurement (b) compound (c) perimeter (d) diagonal
2. The simplest way to find a perimeter of any regular or irregular shape is to measure it directly with a ruler or tape (a) true (b) false (c) maybe (d) I don’t know
3. The perimeter of a rectangle is given as \_\_\_\_\_\_\_\_\_ (a) *l × b* (b) *2(l + b)* (c) *2(l × b)* (d) *2(l – b)*
4. A rectangular piece of land measures 57m by 42m. what is the perimeter of the land ? (a) 198m (b) 298m (c) 507m (d) 72m
5. Circumference of a circle is given as (a) 2πr2 (b) 4l (c) πr2 (d) 2πr
6. Find the perimeter of a parallelogram whose base is 6cm and side 5cm (a) 60cm (b) 20cm (c) 22cm (d) 30cm
7. The following are properties of a square except (a) only one pair of sides is equal (b) all four sides are equal (c) diagonals are equal (d) each angle is 900
8. How many vertices has a cuboid (a) 12 (b) 8 (c) 6 (d) 3
9. Find the volume of a cuboid of dimensions 6m by 3m by 4m (a) 72m3 (b) 24m3 (c0 60m3 (d) 120m3
10. Simplify (-7 + 5 – 3) (a) -15 (b) + 15 (c) +5 (d) -5
11. Solve *-7x = 21* (a) 3 (b) 4 (c) -3 (d) -4
12. 1000 liters equates (a) 1m3 (b) 10m3 (c) 100m3 (d) 1000m3
13. 1000cm3 makes ? (a) 1000*l* (b) 1*l* (c) 1000000*l*  (d) 10*l*
14. How many litres of water does a 5m × 4m × 3m tank hold (a) 60,000*l*  (b) 60*l* (c) 600*l* (d) 6*l*

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1. The two lines above are said to be (a) corresponding (b) alternate (c) parachute (d) parallel

**SECTION B *Answer one question from this section***

1. Draw any triangle A B C
2. Construct the midpoint, M of AB
3. Construct the midpoint, N of BC
4. Measure MN and AC
5. What do you notice?
6. Draw any triangle ABC
7. Construct the perpendicular bisector of each side.
8. What do you notice?

**SECTION C *Answer any two questions from this section***

1. Find the sizes of the lettered angles

**400**

**c0**

**d0**

**1200**

**a0**

**700**

**e0**

**d0**

**g0**

**f0**

**b0**

**c0**

ii.

1. A rectangle has a perimeter of 74m.
2. Find (i) the length of the rectangle if its breadth is 17m -4mks (ii) The breadth of the rectangle if its length is 25m - 4mks
3. A square assembly area has a perimeter of 56m. Find the length of the side of the assembly area -2mks
4. (a) A rectangular room 4m long by 3m wide contains 30m3 of air. Calculate the height of the room - 6mks
5. Calculate the volume of the prism below - 2 mks

**5cm**

**7cm**

1. (a) A school compound is made up of a rectangle and a square. Find the perimeter of the compound. -6mks

**25m**

**90m**

**60m**

1. Find the circumference of the shape below. Take π to be -4mks

**14mm**

DONJAY ACADEMY NURSERY, PRIMARY AND SECONDARY SCHOOL

THIRD TERM EXAMINATION (2022 SESSION)

SUBJECT: MATHEMATICS CLASS: JSS2 SECTION A

1. Given a right-angled triangle ABC, such that the adjacent sides are 3m and 4m respectively. Find the hypotenuse side (a) 3 (b) 4 (c) 5 (d) 6
2. Area of sector is given as \_\_\_\_\_\_\_\_\_\_ (a) (b) (c) (d)
3. Express 0.0000407 correctly to 2 significant figure (a) 0.0 (b) 0.000041 (c) 0.00004 (d) 0.0000407
4. Volume of cylinder is given as \_\_\_\_\_\_\_\_\_\_ (a) (b) (c) (d)
5. What is the angle between NE and SW (a) 900 (b) 450 (c) 1350 (d) 1800
6. If the bearing of secretary’s office from staff room is 1200, what is the bearing of staff room from secretary office? (a) 600 (b) 2300 (c) 3000 (d) 3120
7. Circumference of a circle is given as \_\_\_\_\_\_\_\_\_\_\_ (a) (b) (c) (d)
8. Find the square root of 256 (a) 15 (b) 16 (c) 17 (d) 18
9. Round off 0.995 to the nearest hundredth (a) 1.00 (b) 0.94 (c) 0.94 (d) 1.45
10. Simplify -3 + (-3) – (-11) (a) 17 (b) -17 (c) -5 (d) 5
11. Find the square root of (a) 2.5 (b) 0.2 (c) 1.2 (d) 3.65
12. Which of these statement is true about Pythagorean triple (a) set of three whole numbers which give the lengths of the sides of right-angled triangle (b) set of two numbers giving the lengths of right-angled triangle (c) The hypotenuse and an adjacent side equal to other adjacent side (d) none of the above
13. Which of these is not a Pythagorean-triple (a) [5, 12, 13] (b) [15, 30, 35] (c) [3, 4, 5] (d) [6, 8, 10]
14. A ladder leaning against a wall. The ladder is 7.3m long and the foot of the ladder is 1.8m from the wall. Find how far up the wall the ladder reaches (approximate to 2 s.f) (a) 7.1 (b) 5.7 (c) 1.7 (d) 4.7
15. Which of these statement is not true about three-figure bearing (a) are given as number of degree from the north (b) measured in a clockwise direction (c) measured in three digits (d) none of the above

A

N

D

**600**

**500**

**700**

**400**

***x***

C

B

1. What is the bearing of A from x (a) 600 (b) 1800 (c) 400  (d) 500
2. Find the bearing of B from X (a) 1200 () 1800 (c) 1000 (d) 1100
3. The bearing of C from X is? (a) 1100 (b) 2300 (c) 3100 (d) 2700
4. What is the bearing of D from X (a) 2900 (b) 3100 (c) 2700 (d) 1800
5. The volume of a cone of height h and base radius r is given by (a) (b) (c) (d)
6. Approximate 72.78 to the nearest whole number (a) 72 (b) 72.8 (d) 73 (d) 70
7. What is bearing of G from K in the figure below (a) 980 (b) 3580 (c) 780 (d) 2000

G

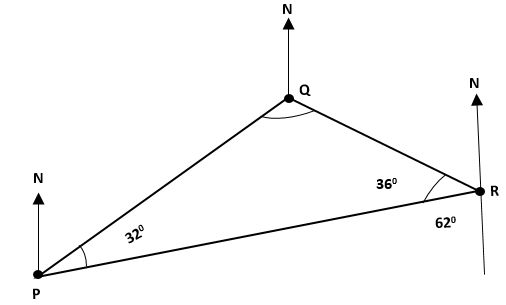
K

2780

N

1. A strip of thin paper is wounded eight times round a cylindrical pencil of diameter 7mm. Use the for π to find the length of the paper (a) 22cm (b) 178cm (c) 78cm (d) 184cm
2. Find the base radius of a cone made from a semi-circle of radius 12cm (a) 6cm (b) 5cm (c) 4cm (d) 3cm
3. Total surface area of a cone is given as (a) (b) (c) (d)
4. Multiply by (a) 276 (b) 127 (c) 192 (d) 74
5. Simplify (a) 3.24 (b) 4.75 (c) 5.72 (d) 7.25
6. If the bearing of Karfe from Suleja is 0670, what is the bearing of Suleja from Karfe? (a) 1130 (b) 2470 (c) 1800 (d) 0670
7. A sector of a circle of radius 6cm and angle 3000, Find the base radius of the cone formed from it (a) 5cm (b) 6cm (c) 7cm (d) 8cm
8. 1000cm3 equates (a) 10*l* (b) 100*l* (c) 2*l*  (d) 1*l*

**SECTION B *Answer question one (1) and any other two(2) questions***

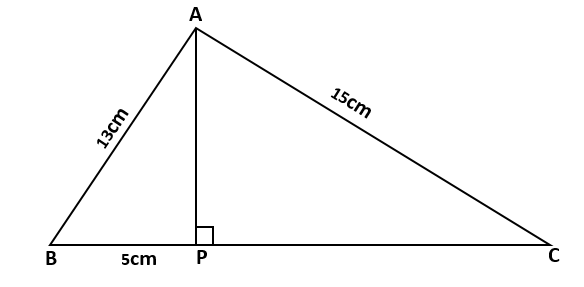
1. 

*Use the sketch above to answer the following questions, each question carry 2 mks.* Find

(i) The bearing of Q from R (ii) The bearing of R from Q (iii) The bearing of Q from P

(iv) The bearing of P from Q (v) The bearing of P from R

1. Calculate the lengths of (i) AP (ii) BC in the figure below -10mks



1. A cylinder of height 12cm and radius 5cm is made of cardboard. Use the value of 3.1 for π to calculate the total area of cardboard needed to make (i) closed cylinder (ii) A cylinder open at one end - 10mks
2. Two dice are rolled together. The scores on both dice are added. Make a table to show all the possible outcomes. What is the probability of scoring (i) An odd number (ii) A prime number (iii) Greater than 2 (iv) A 2. (v) A 7. (vi) A 6 or a 10. (vii) Less than 4
3. A cone has a height of 15cm and a base diameter of 84mm. Calculate:
4. Its volume - 4mks (ii) Its curved surface area (iii) Its total surface area -3mks.

Give your answers to 1 decimal place (Take π = )