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| **OXFORD INTERNATIONAL SCHOOL**  **Pre Exam 2023-24**  **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_ Grade: VII Subject: Mathematics. /50** |

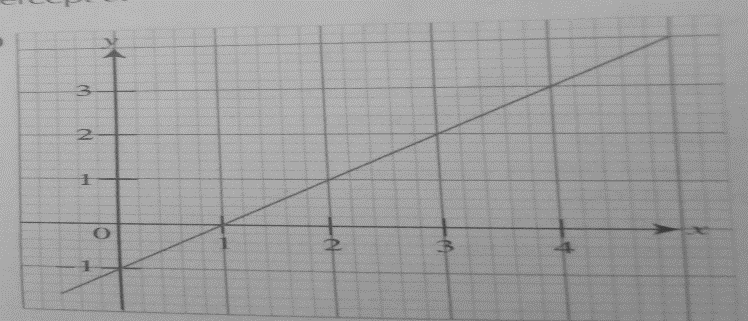
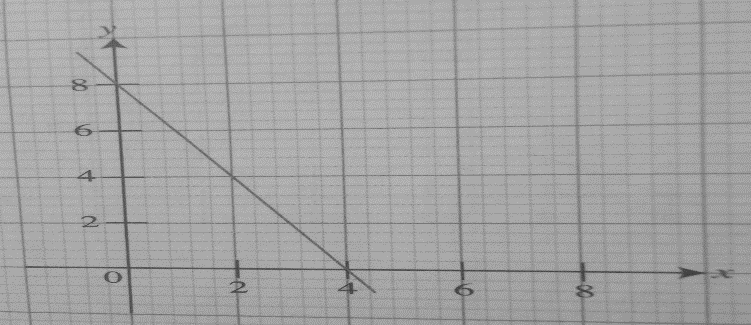
**Q1 (a): Multiple Choice Questions. /10**

1. 6x = 60 a. 6 b. 1 c. -5 d. 25
2. Gradient = \_\_\_\_\_\_
3. b. c. both a and b d. axis
4. \_\_\_\_\_\_\_ is a measure of how steep a slope is.
5. Horizontal b. Vertical c. both d. Gradient
6. Sin A = = \_\_\_\_\_
7. Sin b. c. d. both a and b
8. Sin A = = \_\_\_\_\_
9. Both b and c b. perpendicular c. d. finite
10. A pentagon has \_\_\_\_\_\_ sides. a. 5 b. 4 c. 3 d. 1
11. In a \_\_\_\_\_\_\_\_, the apex is the vertex at the "top" (opposite the base)
12. Sphere b. Pyramid c. Rectangle d. Triangle
13. Total surface area of Pyramid = \_\_\_\_\_\_\_\_\_\_\_
14. Total volume b. total area of all faces c. both a and b d. sphere
15. A shape or an object has \_\_\_\_\_\_\_\_\_ if it can be divided into two identical pieces.
16. Symmetry b. area c. mirror d. lines
17. € is a symbol which means \_\_\_\_\_\_\_\_. If bB, it shows that b is the element of B
18. Not belongs to b. ‘belongs to’ c. U d. Ո

**Q1 (b): Fill in the blanks. /5**

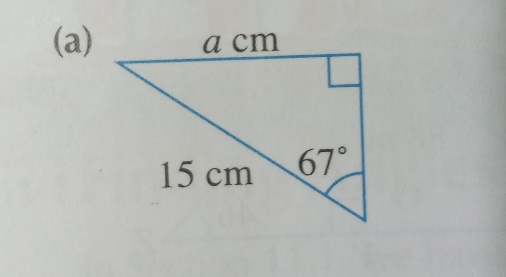
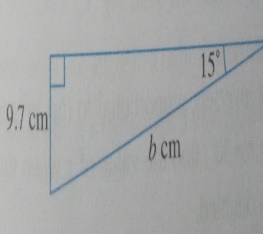
1. The formula of Mean = \_\_\_\_\_
2. Volume of Cylinder = \_\_\_\_\_\_
3. Volume of Pyramid = \_\_\_\_\_\_
4. Y-axis is always be \_\_\_\_\_\_\_
5. Volume of Sphere = \_\_\_\_\_\_\_
6. The line that slopes upwards from left to right its gradient is \_\_\_\_\_\_
7. Three ratios are known as \_\_\_\_\_ ratios.
8. In Mathematics, we use the term ‘set’ to describe any collection of \_\_\_\_\_ and \_\_\_\_\_\_ objects.
9. A’ = \_\_\_\_
10. The area of triangle is \_\_\_\_\_\_ (formula)

**Q2: Given that the equation of the line representing each of the following linear graphs is in the form Y= mx+c, find the gradient m and state the y-intercepts. /5**

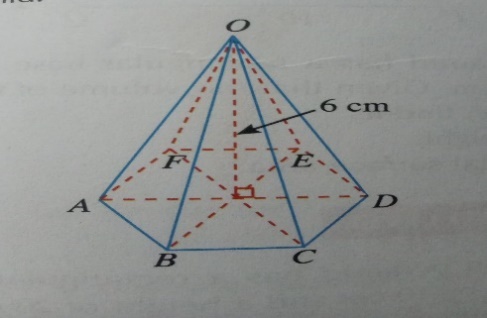
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**Q3: Use calculator to evaluate each of the following. /3 a. b.**

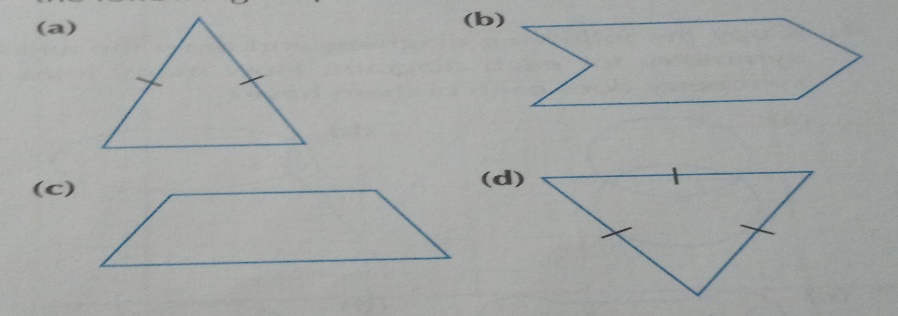
**Q4: Find the value of unknown in each of the following right-angled triangle. /3**

1. **** **b.**

**Q5: OABCDEF is hexagonal Pyramid with a base area of 23 cm2 and a height of 6cm find the Pyramid.** **/5**

1. 

**/5**

**Q6. How many lines of symmetry are there in each of the following shapes? /4**

**Q7. List the element of the following sets. /5**

1. **{vowels in the word “MATHEMATICS”}**
2. **{The seven colors of rainbow}**
3. **{Multiples of 9 which are less than 50)**
4. **{Colors in your school flag}**
5. **{Even numbers which are between 10 and 23}**

**Q8. The number of days the students in a class were absent from school in a term was recorded. /5**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of days absent.** | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **9** |
| **Number of students** | **23** | **4** | **5** | **2** | **2** | **1** | **2** | **1** |

**Find the mean number of days of absence.**

**Q9: Solve the given word problems. /5**

1. **A cone has a height of 14cm and a volume of 132cm3. Find the radius of the circular base. (Take π to be**
2. **The volume of cone with a circular base of radius 8cm is 320cm3 . Find its height.**
3. **A cone has a base area of 20 m2 and a volume of 160cm3. Find the height of the cone.**
4. **A cone has a circular base of radius 3m and a height of 4m. Find the curved surface area of cone.**