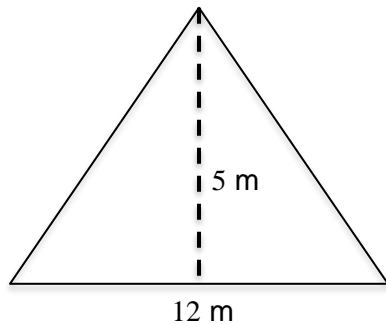


**POTENT ACADEMY REVISION SERIES**  
**MATHEMATICAL ACTIVITIES**  
**GRADE 8 | MODEL 05**

Name \_\_\_\_\_ Date \_\_\_\_\_

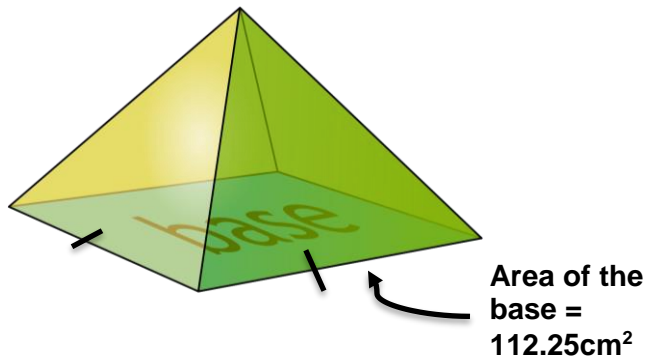
*Instructions: Answer ALL the questions in the spaces provided.*

1. A farmer owns a square field with an area of  $1024 \text{ m}^2$ . Calculate the length of one side of the field.
2. The figure below shows a triangular piece of land with a base of  $12 \text{ m}$  and a height of  $5 \text{ m}$ . Calculate the area of the land in hectares.

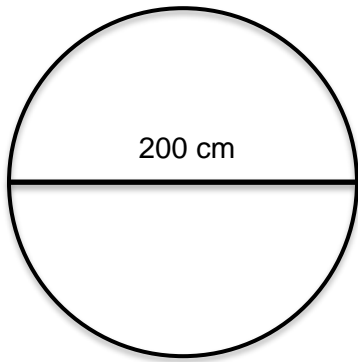


3. Mr. Kimani measured the temperature of a solution as  $5^\circ\text{C}$ . After one hour, the temperature decreased by  $8^\circ\text{C}$ . Use a number line to determine the final temperature of the solution.
4. John's height is  $140 \text{ cm}$  and his sister Jane's height is  $160 \text{ cm}$ .
  - a) Express John's height as a fraction of Jane's height.
  - b) Write the ratio of Jane's height to John's height.
5. The exterior angle of a regular polygon is  $45^\circ$ . Calculate the number of sides of the polygon.

6. The figure below shows the base of a square pyramid. What is the measure of one side of the base if it has an area of  $12.25\text{cm}^2$ ?



7. The figure below shows a circular flower bed with a diameter of 200cm. What is the circumference of the flower bed in metres?

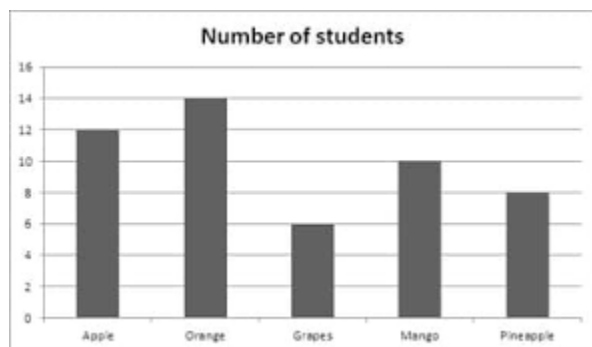


8. List down four properties of a rectangle

- i.
- ii.
- iii.
- iv.

9. Convert  $30^\circ\text{C}$  to Kelvin.

10. The bar graph below shows the favorite fruits of students in a class.



- a) Which fruit is the most popular?
- b) How many more students prefer oranges than pineapple?
- c) What is the total number of students surveyed?