

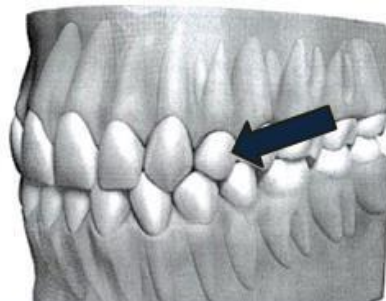
# Dental Anatomy

Lec 2

Dr. Dhifaf Kamil

## Maxillary Premolars

The maxillary premolars are four in number: two in the right and two in the left. They are posterior to the canines and anterior to the molars. They are named so because they are anterior to molars in permanent dentition. The maxillary premolars have shorter crown and shorter roots than those of maxillary canines.



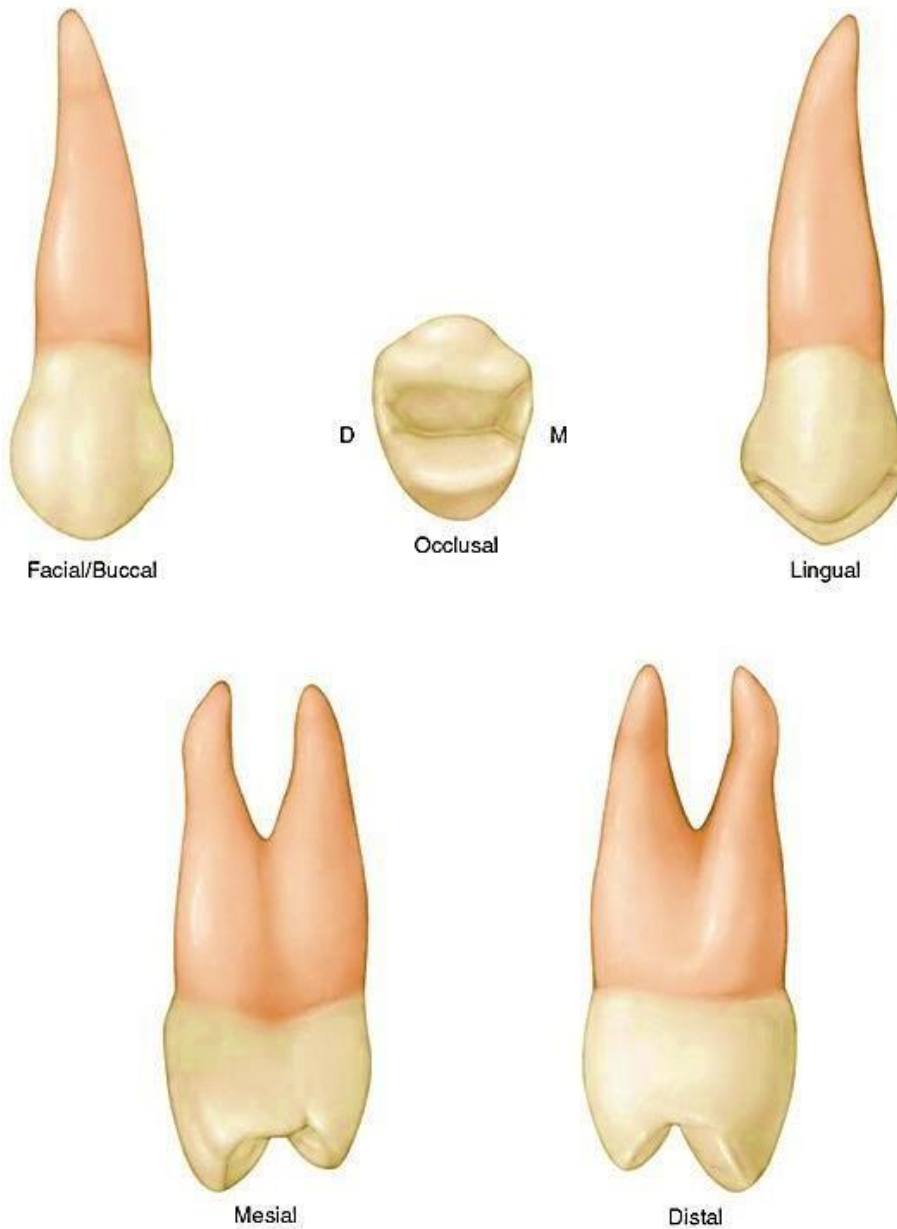
MEASUREMENT TABLE								
	CERVICOINCISAL LENGTH OF CROWN	LENGTH OF ROOT	MESIODISTAL DIAMETER OF CROWN	MESIODISTAL DIAMETER OF CROWN AT CERVIX	LABIO- OR BUCCOLINGUAL DIAMETER OF CROWN	LABIO- OR BUCCOLINGUAL DIAMETER OF CROWN AT CERVIX	CURVATURE OF CERVICAL LINE—MESIAL	CURVATURE OF CERVICAL LINE—DISTAL
Dimensions* suggested for carving technique	8.5	14	7	5	9	8	1	0

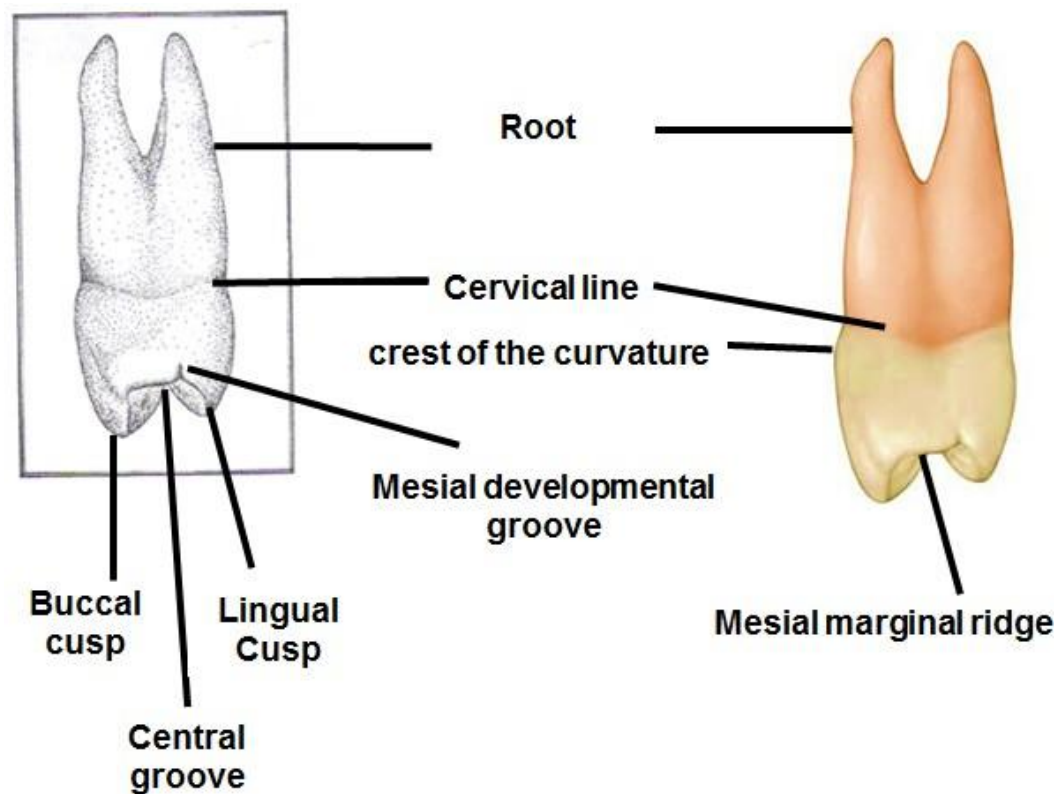
The premolars are intermediate between molars and canines in:

- Form: the buccal aspect of the premolars and the labial aspect of the canines are similar.
- Function: the premolars and molars are used to grind the food.
- Position: the premolars are in the center of the dental arch (posterior to the canines and anterior to the molars).

## ***Maxillary First Premolar***

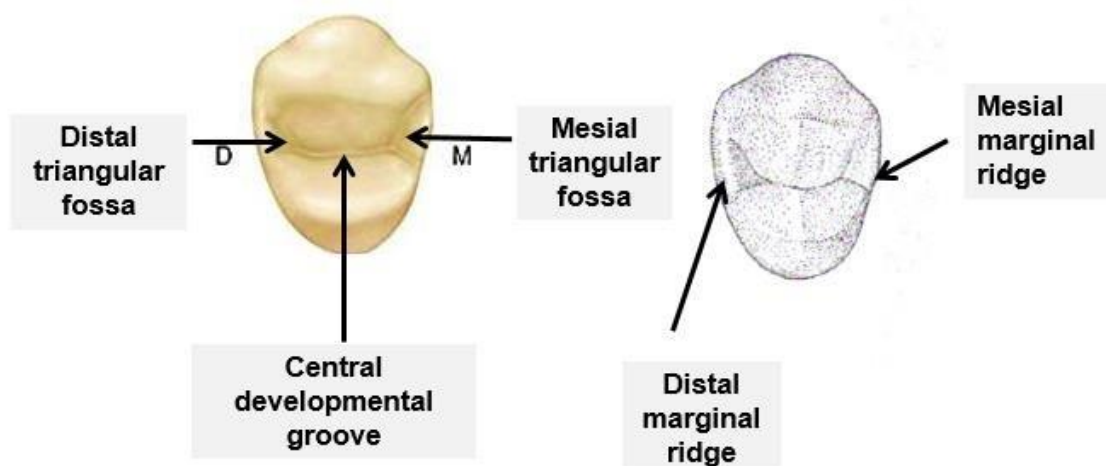
Maxillary first premolar is the fourth tooth from the median line in the maxilla. It has two separated roots buccal root and lingual root with bifurcation in the middle third of the root.





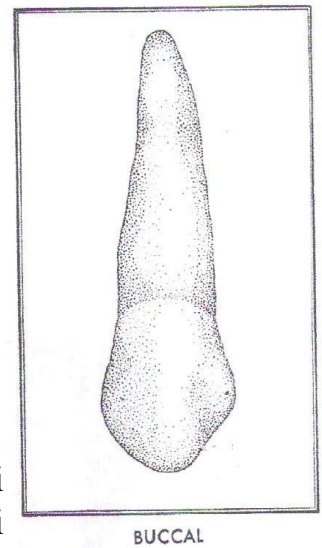
### - Anatomical Landmarks of the Maxillary first premolar:

1. Two cusps: Buccal cusp and lingual cusp.
2. Mesial developmental groove found in the mesial surface of maxillary first premolar.
3. Two marginal ridges: mesial marginal ridge and distal marginal ridge.
4. Two triangular fossae: mesial triangular fossa and distal triangular fossa.
5. Central developmental groove found in the occlusal surface of the maxillary first premolar



## **Buccal Aspect**

1. The root is much shorter than the canine root.
2. The mesial outline of the crown is concave above the contact area. The outline of the contact area is convex. The line from the contact area to the tip of the cusp with slight indentation.
3. The distal outline of the crown is a straight line from the junction of root to the contact area. The line from the contact area to the tip is convex.
4. The line bisecting the contact area at the crest of curvature will be slightly more than half the distance from the cervical line to the tip of the cusp and nearly at the same level.



## **Lingual Aspect**

The lingual aspect has the same outline, with curved line of the lingual cusp about 1 mm shorter than the buccal cusp.

