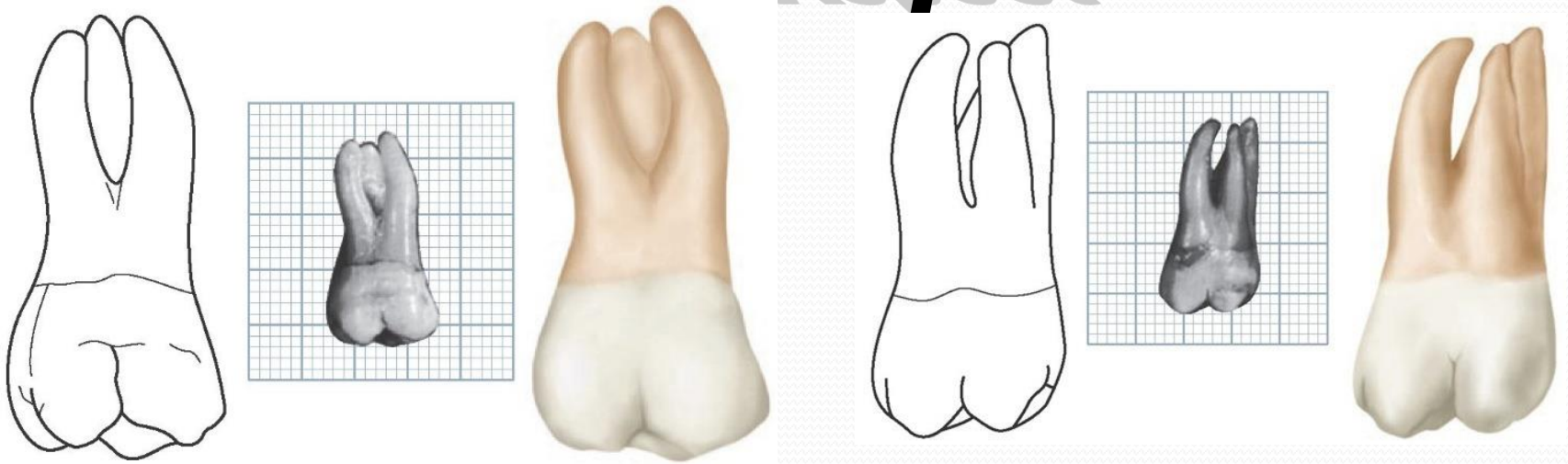

© 143greetings.com
GOOD MORNING
Make Today Beautiful...

Maxillary second molar

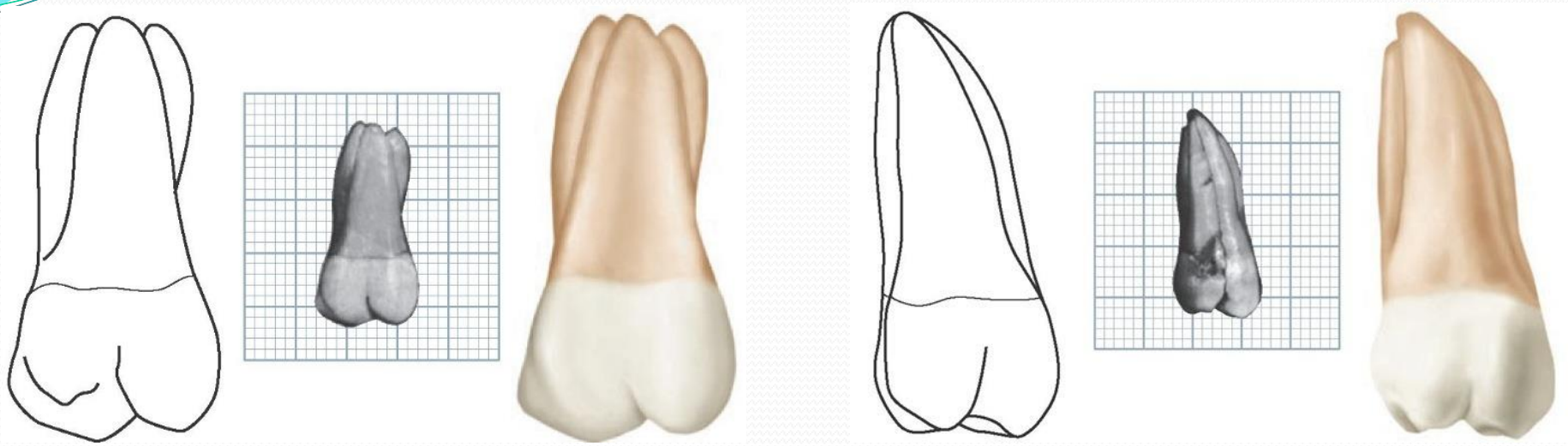
It is the seventh maxillary tooth from the median line. Because it supplements the first molar in function, the design is similar. In describing this tooth, direct comparisons will be made with the first molar both in form & development.

Buccal Aspect



- The crown is shorter cervico-occlusally & narrower mesiodistally.
- The distobuccal cusp shows less development & allows more of the distal marginal ridge & part of the distolingual cusp to be seen.
- The roots are about the same length, but give impression of being longer because the crown is shorter & the roots are closer together at the apices with their axes more nearly parallel (less divergent).
- The roots are inclined distally at a more extreme angle, placing the crest of curvature distally of the distobuccal root (at the apical end) slightly distal to the distal extremity of the crown. The apex of the mesiobuccal root is on a line with the buccal groove of the crown instead of the tip of the mesiobuccal cusp as found on the first molar.

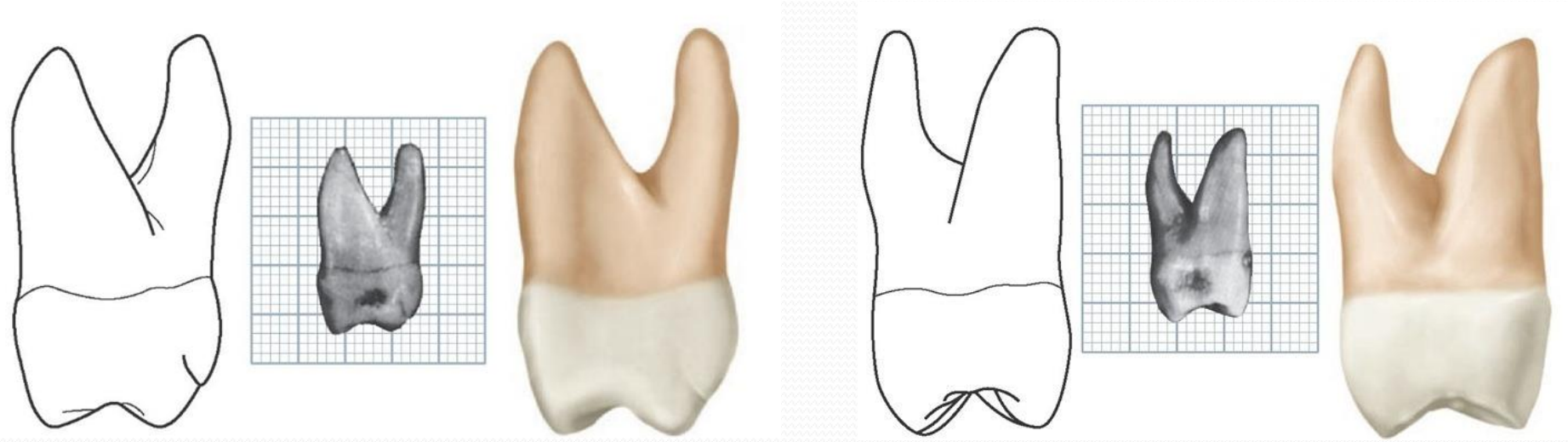
Lingual Aspect



- The differences between second & first molars to be noted here in addition to those mentioned before are these:

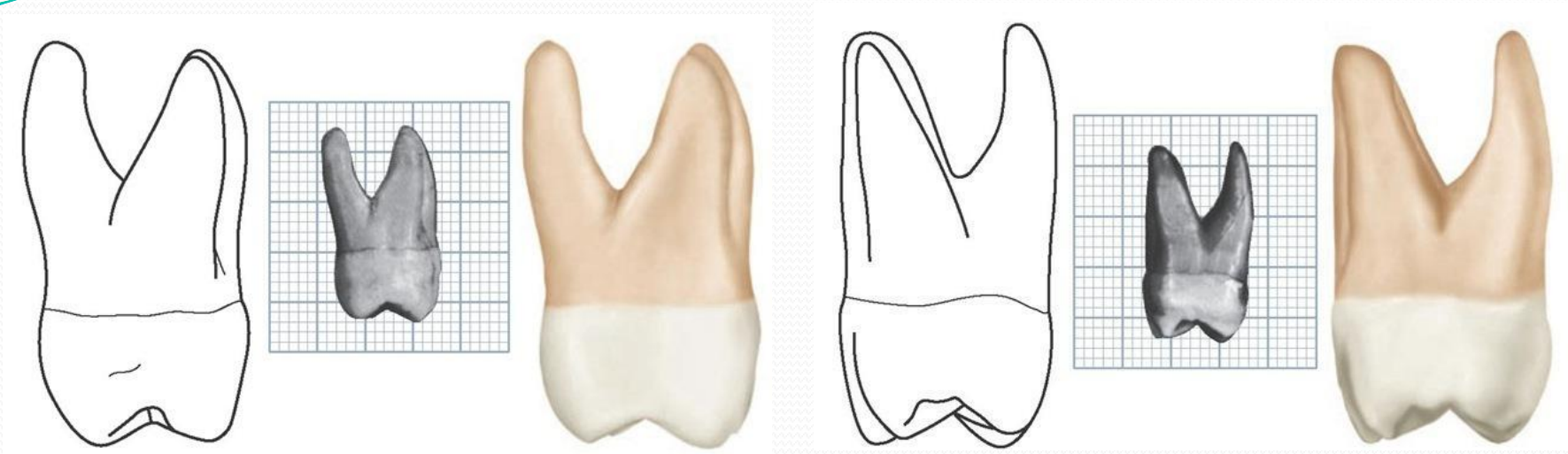
1. The distolingual cusp of the crown is smaller.
2. The distobuccal cusp may be seen through the sulcus between the mesiolingual & distolingual cusps.
3. There is no fifth cusp.
4. The apex of the lingual root is in line with the distolingual cusp tip instead of the lingual groove.

Mesial Aspect



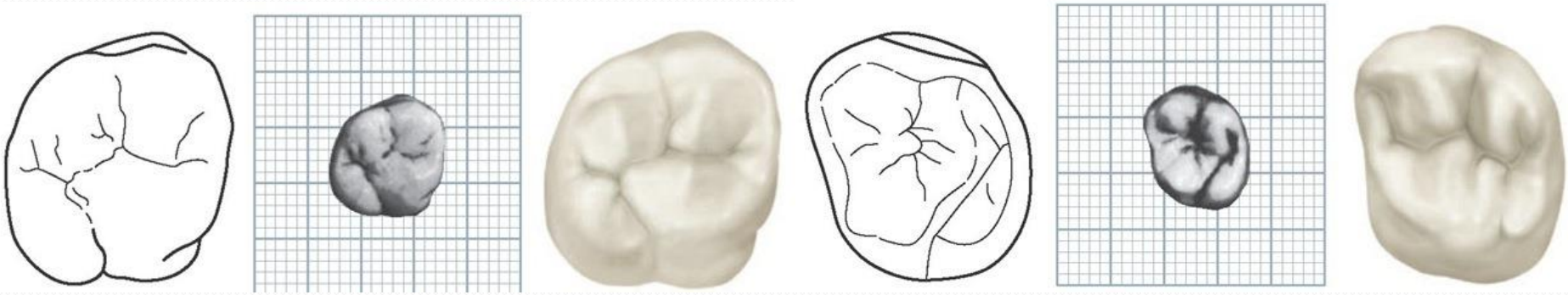
- The buccolingual dimension of the crown is about the same, but the crown length is less.
- The fifth cusp is missing.
- The roots don't spread as far buccolingually being with the confines of the buccolingual crown outline.

Distal Aspect



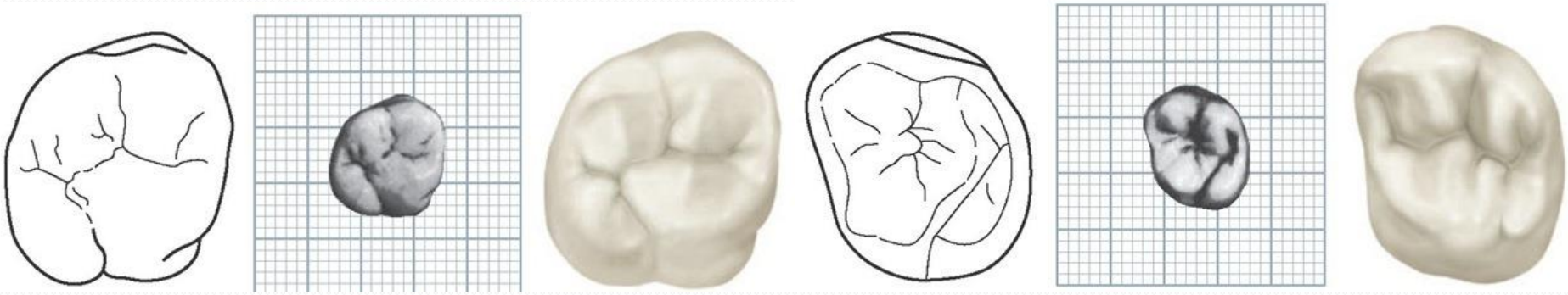
- Because of the angulation of the buccal surface & the less development of the distobuccal cusp more of the buccal surface & mesiobuccal cusp may be seen.
- The mesiolingual cusp can't be seen.
- The apex of the lingual root is in line with the distolingual cusp.

Occlusal Aspect



- Two types of maxillary second molars are found when we are viewing the occlusal aspect:

1. The type that is seen most frequently has an occlusal form which resembles that of the first molar, but the rhomboidal outline is more extreme.
2. The type that bears more resemblance to a typical third molar form. The distolingual cusp is poorly developed & makes the development of the other three cusps predominate. This results in a heart-shaped form from the occlusal aspect.

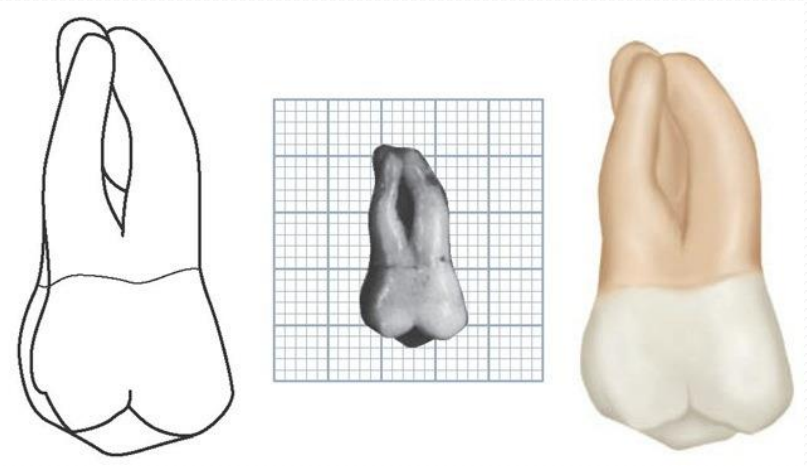


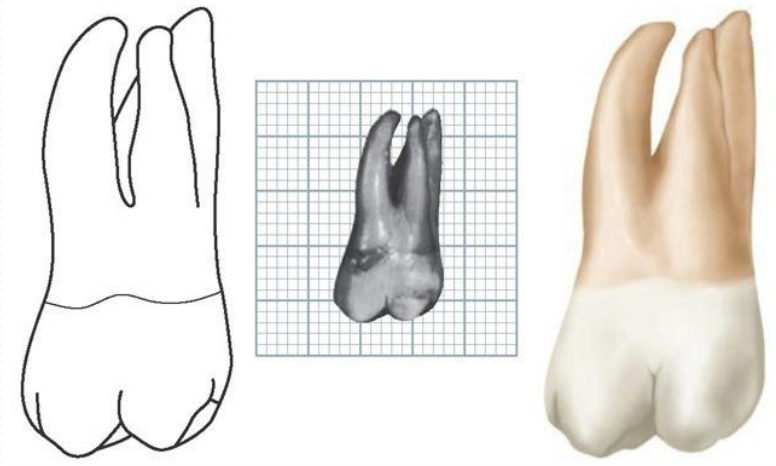
- ***- The first type (the most frequent) will be described here:***
- The outline is rhomboidal but with more extreme angulation than that of the maxillary first molar, the acute angles are less & the obtuse angles are greater.
- The buccolingual diameter of the crown is about the same but the mesiodistal diameter is less.
- The mesiobuccal & mesiolingual cusps are just as large & well-developed as in the first molar, but the distobuccal & distolingual cusps are smaller & less well-developed.
- The crown tapers more distally than that of the first molar.
- It is not uncommon to find more supplemental grooves as well as accidental grooves & pits on the occlusal surface of second molar than are usually found on a maxillary first molar.

Maxillary third molar

- It is the eighth & last maxillary tooth from the median line. Because it supplements the second molar in function, the fundamental design is similar, but it is smaller & not so well-developed.
- This tooth shows many variations in different individuals. It may vary considerably in size, contour, & relative position to the other teeth. All third molars, maxillary & mandibular, shows more variations in development than any of the other teeth in the mouth. Occasionally they appear as anomalies bearing little or no resemblance to neighboring teeth.
- The predominating third molar design, when we view the occlusal surface, is that of the heart-shaped type of second molar. The distolingual cusp is very small & poorly developed in most cases, & it may be absent entirely.
- A third molar that is considered average in its development & one that would be in good proportion to the other maxillary molars & with an occlusal form considered normal will be described here in direct comparisons with maxillary second molar.

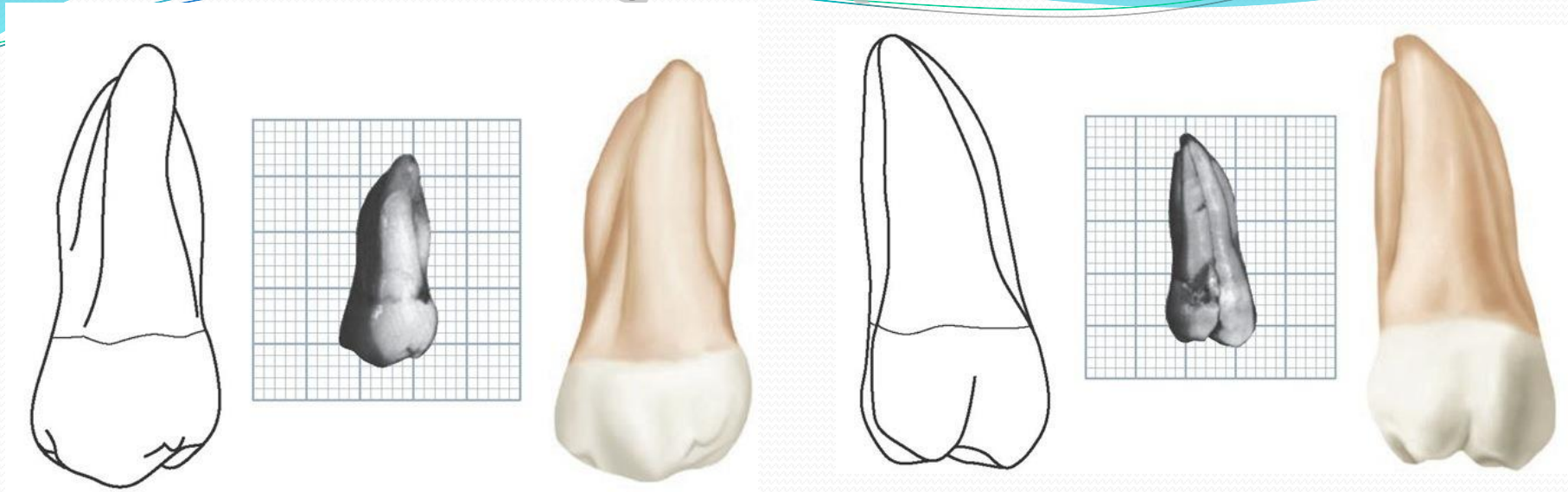
Buccal Aspect





- The crown is shorter cervico-occlusally & narrower mesiodistally.
- The roots are fused together, functioning as one large root, & are shorter cervico-apically.
- The fused roots end in a taper at the apex.
- The roots has a more extreme inclination to the distal, giving the apices of the fused roots a more distal relationship to the center of the crown.

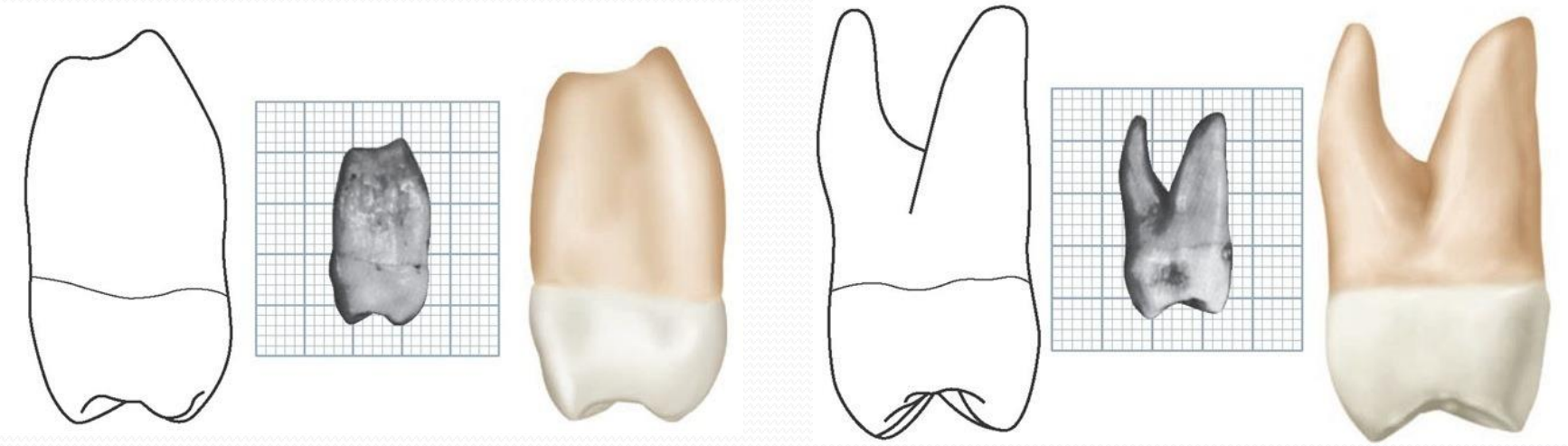
Lingual Aspect



- In addition to the differences mentioned above:

1. There is usually just one large lingual cusp, therefore no lingual groove.
2. In many cases, third molars with the same essential features have a poorly developed distolingual cusp with a developmental groove lingually.

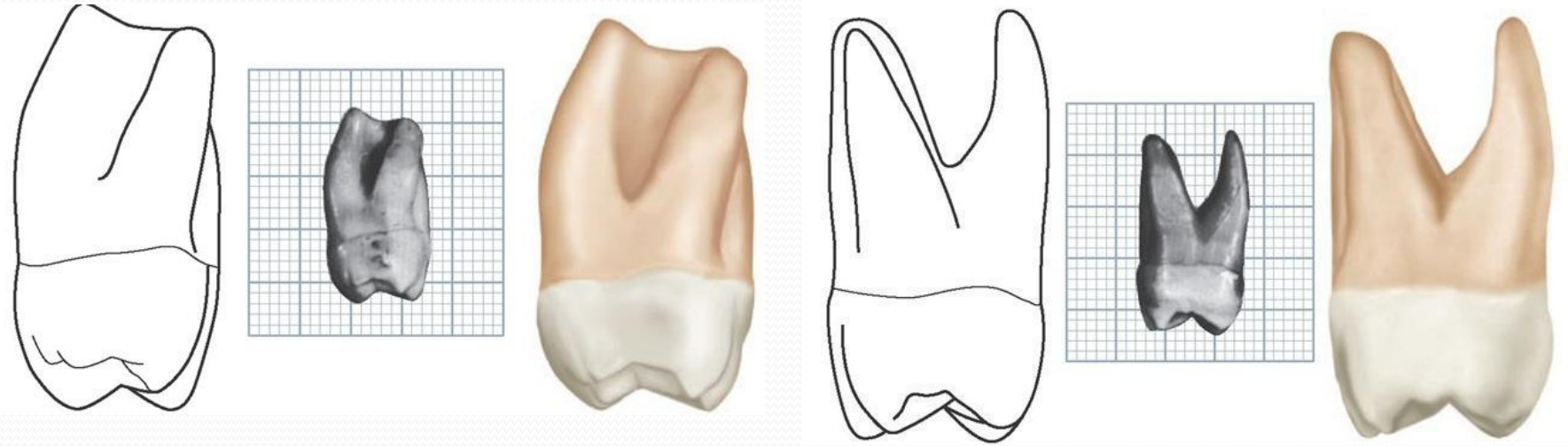
Mesial Aspect



- In addition to the differences in measurement:

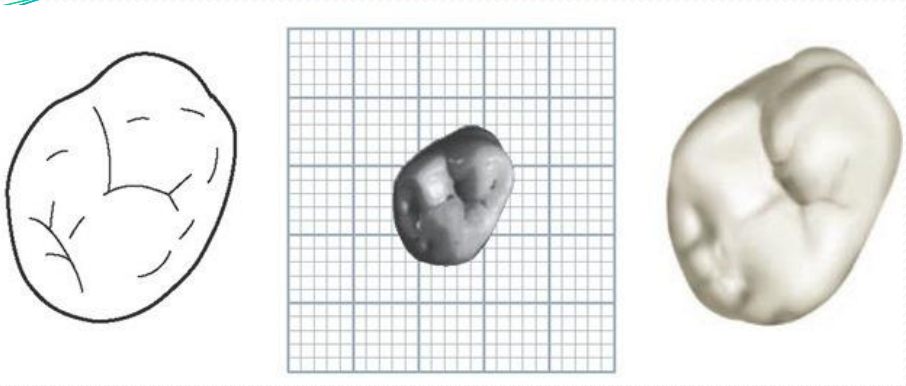
1. The fused roots are tapered & a bifurcation usually in the region of the apical third.
2. The root portion is considerably shorter in relation to the crown length.
3. Both, the crown & the root portions are inclined to be poorly developed, with irregular outlines.

Distal Aspect



- The measurement from the cervical line to the marginal ridge is short.
- More of the occlusal surface may be seen because of the more acute angulation of the occlusal surface in relation to the long axis.
- Most of the buccal surface of the crown is in view.

Occlusal Aspect



- The occlusal aspect presents a heart-shaped outline.
- The lingual cusp is large & well-developed.
- There is little or no distolingual cusp which gives the tooth a semicircular outline from one contact area to the other.
- On this type of tooth there are three functioning cusps: two buccal & one lingual.
- There is usually many supplemental grooves & many accidental grooves.
- There are many variations in the outline form such as:
  - Triangular outline with three cusps.
  - rhomboidal outline with four cusps.
  - one cusp type (peg-shaped).
  - congenitally missing.


THANK
YOU