

31/34

CALIFORNIA OPTICAL LICENSE SCHOOL
Fall Session, 1990
VI

- C1. Most ophthalmic frames today are measured utilizing the boxing system of measurement. In this system, the "B" measurement represents the _____.
- a. lens difference
 - b. the lens width
 - c. the lens depth
 - d. the effective diameter
- A2. The boxing method of measurement is especially useful since it can accurately locate the _____ of the lens.
- a. geometric center
 - b. optical center
 - c. primary focal point
 - d. principal axis
- A3. A certain patient is found to have a monocular PD measuring R: 31mm and L: 33mm. The box measurement of the frame selected equals 52/18. Locate the major reference points (MRPs) for each eye.
- a. R=4mm in; L=2mm in
 - b. R=2mm in; L=4mm in
 - c. R=2mm out; L=2mm out
 - d. R=5mm in; L=3mm in
- R 4IN 70
L 2IN 35
- D4. When measuring a frame, the term DBL is used to designate:
- a. temple length
 - b. effective diameter
 - c. the least distance between the geometric centers of the frame
 - d. the least distance between lenses

8 A 5.

Which of the following best describes a semi-rimless mounting?

- a. A front consisting of nose pads, pad arms, bridge, eyewires, and the temples.
- ☒ b. A bridge with lens bars connecting the endpieces and temples. *what about Nose pads?*
- c. A bridge and a pair of temples.
- d. A center, a pair of temples, and a pair of endpieces.

C 6.

The style of bridge which is designed to rest entirely on the nose pads is the:

- a. saddle
- b. semi-saddle
- c. keyhole
- d. contour

D 7.

A frame with a saddle bridge has been selected for a child of seven years. For which of the following reasons is this a better choice than a comparable frame with adjustable pads?

I A saddle bridge distributes the weight of the completed eyewear more evenly over a greater portion of the nose area.

II In the event of an accident, adjustable pads are more likely to cause injury.

III A saddle bridge retains its adjustment better than a frame with adjustable pads.

- a. I only
- b. III only
- c. I and II
- d. I, II and III

C 8.

Normal slab-off (bicentric grinding) is ground on the lens whose vertical meridian has the:

- a. strongest curves
- b. most plus power
- c. least plus power
- d. least minus power

B 9.

A patient refracted at an 8 mm vertex distance is prescribed a +13.00 diopter sphere. The fitted vertex is 12 mm. The compensated lens power becomes:

- a. +11.75 D
- b. +12.37 D
- c. +13.25 D
- d. +13.75 D

B 10.

In general, a person with a long nose is best suited cosmetically for a frame with a _____ bridge.

- a. Keyhole
- b. Saddle
- c. High
- d. Rocking pad

D 11.

An expression associated with the term, circle of least confusion, is spherical equivalent. The prescription +4.00 +3.00 x 45 has its "circle of least confusion" associated with the prescription:

- a. +2.50
- b. +3.50
- c. +5.00
- d. +5.50

C 12.

A slab-off lens is for the correction of:

- a. astigmatic errors
- b. excessive weight of lens
- c. excessive prism imbalance at the reading level
- d. exotropia

B 13.

Rx: +4.50 + 0.50 x 90
+2.00 + 0.25 x 90
Add: +1.75

What is the vertical prismatic imbalance at a 10 mm reading level?

- a. 2.0 prism diopters
- b. 2.5 prism diopters
- c. 3.0 prism diopters
- d. 3.5 prism diopters

B14. The reverse slab-off design utilizes base down prism in the lens with the _____ in the vertical meridian.

- a. most minus power
- b. least minus power
- c. greatest cylinder power
- d. least cylinder power

D ~~X~~ 15. In the following prescription indicate the amount of reverse slab off needed to neutralize the vertical prismatic imbalance! The reading level is 10 mm.

-5.00 -0.50 x 180	550	2 Δ BD R OD
-2.75 -0.75 x 180	350	
Add +2.50		

- a. 2.25 prism diopters BD, OD
- b. 2.25 prism diopters BD, OS
- c. 2.0 prism diopters BD, OD
- d. 2.0 prism diopters BD, OS

B16. Which of the following lens parameters is *not* considered when calculating vertical imbalance?

- a. reading depth
- b. reading addition
- c. sphere power in the ninety degree meridian
- d. cylinder power in the ninety degree meridian

D 17. Vertex distance compensation for spectacle lenses is most needed for prescriptions which begin at:

- a. +/- 2.00 D
- b. +/- 4.00 D
- c. +/- 5.50 D
- d. +/- 7.00 D

A 18. Rx: ^{+ 5}
^{+4.75}
+2.75 -1.00 x 120
+2.50 -0.75 x 110
Add +2.25

The patient has requested a pair of single vision lenses to use exclusively for reading at the near point. What will be the power of these lenses?

- a. +5.00 -1.00 x 120
+4.75 -0.75 x 110
- b. +5.00 sph
+4.75 sph
- c. +5.00 -1.00 x 30
+5.00 -0.75 x 30
- d. None of the above

B 19. It is generally accepted procedure to fit the top of the trifocal segment to the:

- a. edge of the lower lid margin
- b. bottom edge of the pupil
- c. upper edge of the pupil
- d. upper lid margin

C 20. The relatively new epoxy frame material which is relatively light in weight and maintains a "memory" which causes it to revert to its original shape when heated is called:

- a. cellulose acetate
- b. cellulose nitrate
- c. optyl
- d. cellulose proprionate

E 21. The frame selection criteria most suitable for higher minus prescriptions lenses is:

- a. smaller eyesize
- b. rounder shapes
- c. heavier frame material
- d. lightweight lenses
- e. all of the above

B 22. What would be the "theoretical" minimum blank size for the following frame and PD combination? Box measurements: A=54mm; B=20mm; ED=56mm; PD=63mm

- a. 65mm
b. 67mm
c. 69mm
d. 71mm

54
20
74
63
11

56
18
74

56
9
65

63

D 23. The "B" measurement of a frame is equal to 54mm on the box. A FT 28 bifocal segment needs to be fit at a height of 23mm. Where is the segment line positioned relative to the datum line of the frame.

- a. 3mm above
b. 3mm below
c. 4mm above
d. 4mm below

27
2
4

A 24. If the lenses of a patient wearing -15.00 diopter spheres are brought closer to his/her eyes, what if any effect will this have on the effective power?

- a. increase minus power effect
b. decrease minus power effect
c. cause prism base in effect
d. cause prism base out effect

D 25. If a +10.00 diopter lens is moved 5 mm nearer the eye, it will be about:

- a. 0.25 D stronger plus
b. 0.25 D weaker plus
c. 0.50 D stronger plus
d. 0.50 D weaker plus

D 26. The "B" measurement of a frame is equal to 54 mm on the box. A FT 28 bifocal segment is fit at a height of 23 mm. Where is the segment line positioned relative to the datum line of the frame?

- a. 3 mm above
b. 3 mm below
c. on line
d. 4 mm below

B 27. What would be the "theoretical" minimum blank size for the following frame and PD combination?
Box measurements: A=54mm; DBL=20mm; ED=56mm;
PD=63mm.

- a. 65 mm
- b. 67 mm
- c. 69 mm
- d. 71 mm

D 28. When calculating actual minimum blank size which of the following must be taken into account?

- a. possible imperfections along the periphery of the uncut lens such as chips or bubbles
- b. blank size availability from the lens manufacturer
- c. vertical multifocal segment decentration
- d. all of the above

A 29. A certain patient is found to have a monocular PD measuring R: 31mm and L: 33 mm. The box measurement of the frame selected equals 52/18. Locate the major reference points (MRPs) for each eye.

- a. R=4mm in; L=2mm in
- b. R=2mm in; L=4mm in
- c. R=2mm out; L=2mm out
- d. R=5mm in; L=3mm in

70 25
14
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B 30. A patient comes in with a prescription requiring a large amount of plus power (+12.50 diopters) and with a notation vertex distance 12mm. You find that when fitted with a frame, the lens will set 14mm from his eye. What change will be necessary in the frame to be ordered?

- a. more plus sphere power
- b. less plus sphere power
- c. more minus cylinder power
- d. less minus cylinder power

**SUPPLEMENTARY QUESTIONS
COMMUNICATION WITH CONSUMER**

31. Plastic lenses weigh about _____ less than glass.
- a. 30%
 - b. 40%
 - c. 50%
 - d. 60%
32. Malpractice usually refers to the professional negligence by persons who provide health services. Which one of the following categories of people is least likely to be sued for malpractice?
- a. consumer
 - b. optician
 - c. optometrist
 - d. ophthalmologist
33. Allegations of negligence require that the defendant (physician, optometrist, optician) did not conform to the standard of _____ expected of like professionals acting under the same or similar circumstances.
- a. warning
 - b. care
 - c. inspection
 - d. safety glasses
34. When the optician advises the consumer as to the breakage of lenses, the risk of injury should be described in terms of:
- a. impact resistance
 - b. shatterproof
 - c. lens inspection
 - d. lens verification
35. Frames that cause injury due to improper fit or modification may trigger a _____ claim.
- a. failure to warn
 - b. failure to inspect
 - c. breakage
 - d. negligence

B36.

Some of the high costs of health care can be attributed to:

- a. professional jealousy
- b. malpractice suits
- c. professionalism
- d. outstanding service

BKC37.

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As a health care practitioner, the optician should always remember that he or she is responsible for the _____ provided to the consumer.

- a. reimbursements
- b. ANSI standards
- c. service
- d. liability

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