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ABO Study Guide
Review Questions
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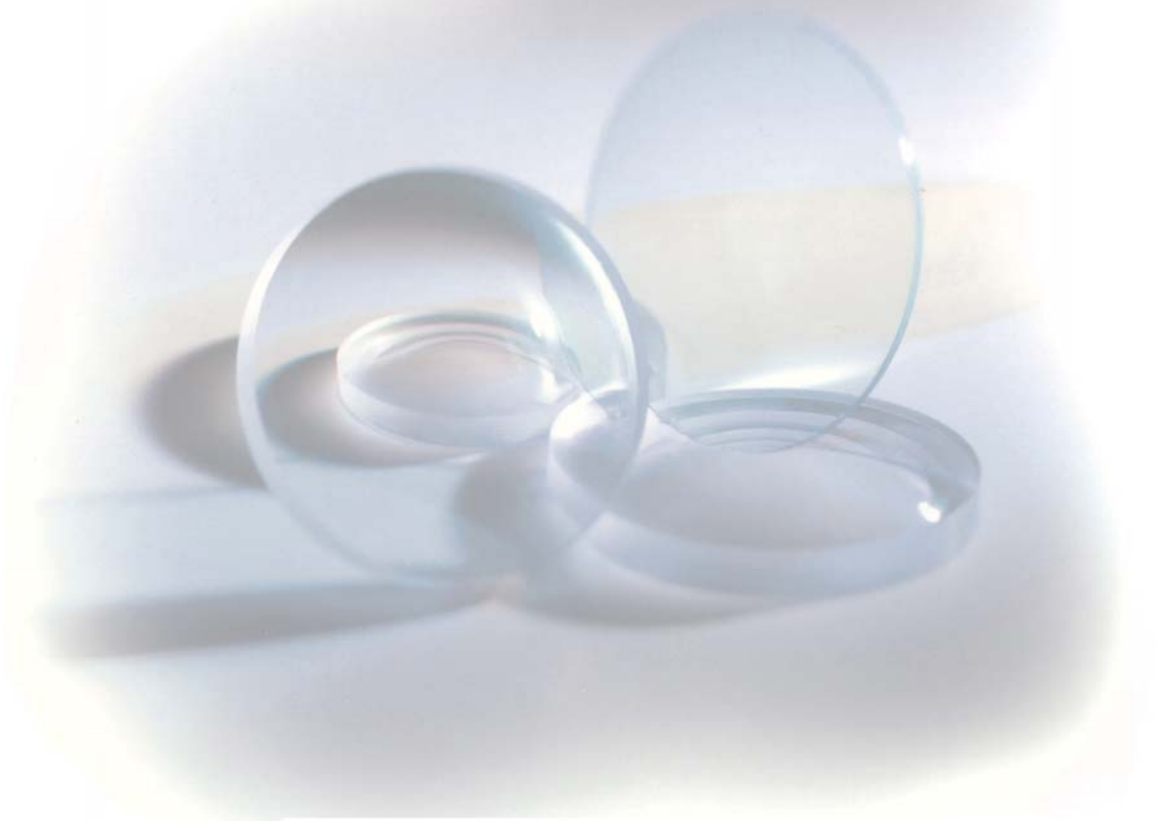

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- Inspire innovation, creativity, and collaboration in the optical professions.

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CHAPTER 1: OCCULAR ANATOMY 4

CHAPTER 2: BASIC OPTICAL PRINCIPLES 8

CHAPTER 3: LENS FORM 11

CHAPTER 4: LENS OPTIONS 16

CHAPTER 5: FRAMES 19

CHAPTER 6: TOOLS 23

CHAPTER 7: REGULATIONS AND STANDARDS 24

BONUS QUESTIONS 25

REVIEW QUESTIONS ANSWER KEY 28

DOCUMENT SPONSORS AND CONTRIBUTORS 29

DOCUMENT LICENSE 29

Chapter 1: OCCULAR ANATOMY

1. The eye is made up of three layers, they are the:
    a. Sclera, Choroid, and Retina
    b. Fibrous tunic, Vascular tunic, and Nervous tunic
    c. Iris, Choroid, and Retina
    d. Cornea, Iris, and Retina

2. The corneal consists of 5 layers which in order from anterior to posterior are:
    a. Bowmans membrane, Epithelium, Endothelium, Stroma, Descemets membrane
    b. Epithelium, Descemets membrane, Stroma, Bowmans membrane, Endothelium
    c. Epithelium, Bowmans membrane, Stroma, Descemets membrane, Endothelium
    d. Endothelium, Descemets membrane, Stroma, Bowmans membrane, Epithelium

3. The amount of light entering the eye is controlled by the:
    a. Pupil
    b. Iris
    c. Crystalline Lens
    d. Fovea

4. There are approximately ____ million rods located mainly in the periphery of the retina and ____ million cones located centrally in retina. (place them in the correct order)
    a. 6, 120
    b. 2, 160
    c. 160, 2
    d. 120, 6

5. The term for the refractive condition where light comes to a focus directly on the retina:
    a. Hyperopia
    b. Myopia
    c. Emmetropia
    d. Astigmatism

6. The term for the refractive condition where light comes to a focus behind the retina:
    a. Hyperopia
    b. Myopia
    c. Emmetropia
    d. Astigmatism

7. The term for the refractive condition where light comes to a focus in front of the retina:
    a. Hyperopia
    b. Myopia
    c. Emmetropia
    d. Astigmatism

8. The term for the refractive condition where light comes to a focus on 2 different points:
    a. Hyperopia
    b. Myopia
    c. Emmetropia
    d. Astigmatism

9. The onset of presbyopia generally begins at age:
    a. 40
    b. 45
    c. 50
    d. 55

10. The 6 extraocular muscles responsible for stabilization of the eye are:
    a. Lateral rectus, Medial rectus, Superior rectus, Inferior rectus, Superior oblique, Inferior oblique
    b. Lateral rectus, Medial rectus, Superior rectus, Inferior rectus, Nasal oblique, Temporal oblique
    c. Nasal rectus, Temporal rectus, Superior rectus, Inferior rectus, Superior oblique, Inferior oblique
    d. Lateral nasal, Medial temporal, Superior rectus, Inferior rectus, Superior oblique, Inferior oblique

11. When the eye has a tendency to turn from it's normal position it is called:
    a. Tropia
    b. Exotropia
    c. Phoria
    d. Exophoria

12. When the eye has a definite or obvious turning from it's normal position it is called:
    a. Tropia
    b. Exotropia
    c. Phoria
    d. Exophoria

13. Phorias and tropias are further defined by their direction of movment: ____ as meaning outward (temporally), ____ as meaning inward (nasaly), ____ as meaning downward, and ____ as meaning upward. (place them in the correct order)
    a. Eso, exo, hypo, hyper
    b. Exo, eso, hyer, hypo
    c. Hypo, hyper, exo, eso
    d. Exo, eso, hypo, hyper

14. We really see with our _____ .
    a. eyes not our brain
    b. brain not our eyes
    c. glasses not our eyes
    d. visual axis not our brain

15. A perfect human eye is said to be _____.
    a. myopic
    b. emmetropic
    c. hyperopic
    d. superopic

16. Everyone will suffer from _____ if they live long enough.
    a. myopia
    b. hyperopia
    c. presbyopia
    d. astigmatism

17. Astigmatism means that the patient's cornea is _____.
    a. Clear
    b. misshapen
    c. cloudy
    d. round

18. The fibrous tunic consists of the
    a. Iris and cornea
    b. Retina and optical disc
    c. Sclera and cornea
    d. Sclera and choroids

19. Fusion occurs in the
    a. retina
    b. optic nerve
    c. brain
    d. cornea

20. Aqueous humor is produced by the
    a. Ciliary body
    b. Choroid
    c. Cholera
    d. Canal of Schlemm

21. The index of refraction of the cornea is
    a. 1.33
    b. 1.37
    c. 1.49
    d. 1.58

22. When light entering the eye, without corrective lenses, comes to a focus partially in front of the retina and partially in back of the retina, the patient's refractive error is _____ .
    a. Myopia
    b. Hyperopia
    c. Mixed astigmatism
    d. Antimetropia

23. When light entering the eye, without corrective lenses, comes to a focus in front of the retina, the patient's refractive error is _____.
    a. Myopia
    b. Presbyopia
    c. Hyperopia
    d. Antimetropia

24. The patient normally has no need for any visual correction for distance, but does require prescription lenses to see well at near. This patient's refractive error is known as
    a. Myopia
    b. Presbyopia
    c. Hyperopia
    d. Mixed astigmatism

25. An Rx with the O.D. minus and the O.S. plus is an obvious case of _____.
    a. Emmetropia
    b. Antimetropia
    c. Hetermetropia
    d. Isometropia

26. Accommodation is defined as _____
    a. light rays entering the eye
    b. the act of the crystalline lens changing its shape to focus for objects at varying distances
    c. the refracting power of the cornea
    d. a reductions of visual acuity with no apparent cause

Chapter 2: BASIC OPTICAL PRINCIPLES

1. The speed of light is:
    a. 160,000 meters / second
    b. 186,000 meters / second
    c. 169,000 miles / hour
    d. 186,000 miles / second

2. The wavelength of 700nm is seen as what color:
    a. Red
    b. Green
    c. Violet
    d. Blue

3. In a minus powered lens light rays ____ and come to a focal point ____ the lens.
    a. Converge, behind
    b. Converge, in front of
    c. Diverge, in front of
    d. Diverge, behind

4. Light rays pass through a lens and converge at a point 50cm behind the lens, what is the power?
    a. 0.20 D
    b. 0.02 D
    c. 2.00 D
    d. 0.50 D

5. 1 Prism Diopter can be described as deviating a ray of light:
    a. 1 meter / 1 centimeter
    b. 10 centimeters / 1000 centimeters
    c. 1 millimeter / 1 meter
    d. 1 meter / 1 millimeter

6. 3 Prism Diopters base in on the right eye can also be described as:
    a. 3 @ 000º
    b. 3 @ 180º
    c. 3 @ 270º
    d. 3 @ 090º

7. Using Prentice's Rule a -4.00 lens must be decentered ___ to induce 1.00 Prism Diopter:
    a. 1.0 mm
    b. 2.5 mm
    c. 10 mm
    d. 2.0 cm

8. The index of refraction is lowest in
    a. Air
    b. Water
    c. Plastic
    d. Glass

9. When the direction of light changes as it passes from one medium to another, it is called
    a. Reflection
    b. Refraction
    c. Diffusion
    d. Retraction

10. The focal length of a +2 diopter lens is
    a. +2 cm
    b. +5 cm
    c. +50 cm
    d. +2 meters

11. A +3.00D lens has the following prismatic effect 8 mm below the optical center:
    a. 2.4 base up
    b. 2.4 base down
    c. 2.4 base out
    d. 2.4 base in

12. One prism diopter _____ .
    a. Focuses parallel light rays at 40 cm
    b. Deviates a ray of light 1 cm at a distance of one meter
    c. Deviates a ray of light towards the apex
    d. Focuses parallel rays of light at one meter

13. One of the ways of identifying a lens with minus power is to look for:
    a. Parallel rays of light coming to a point focus behind lens
    b. Lens thicker in the center than the edge
    c. Objects seen through the lens are brighter
    d. Objects seen through the lens seem to move in the same direction as the lens is moving

14. The focal length of a lens may be altered by:
    a. Making the lens smaller
    b. Making the lens larger
    c. Changing the curvature of one surface
    d. Coating the surface to prevent reflections

15. A +5.00 diopter lens decentered 2 mm creates ____ diopters of prism.
    a. 0.10
    b. 0.25
    c. 2.50
    d. 1.00

16. The P.D. written on the order is mistakenly noted as 70 mm, when the actual measurement should be 66 mm. What unwanted prism would be found in the prescription if the distance prescription is O.U. -15.00D sphere?
    a. 3ΔD base in each eye
    b. 3ΔD base out each eye
    c. 2ΔD base in each eye
    d. 2ΔD base out each eye

Chapter 3: LENS FORM

1. A lens clock is used to measure
    a. Astigmatism
    b. pupillary distance
    c. vertex distance
    d. base curve

2. Transpose the following prescription: +2.25 +1.75 X 085
    a. +2.25 -1.75 X 085
    b. -4.00 +1.75 X 175
    c. +4.00 -1.75 X 175
    d. -2.25 +1.75 X 085

3. Equiconcave, flat concave, and meniscus are ALL types of
    a. minus lenses
    b. plus lenses
    c. astigmatic lenses
    d. spherocylinder lenses

4. Equiconvex, flat convex, and meniscus are ALL types of:
    a. minus lenses
    b. plus lenses
    c. astigmatic lenses
    d. spherocylinder lenses

5. The reason for using a "best form" lens is to minimize
    a. aberrations
    b. weight
    c. magnification
    d. index

6. A lens has a front surface power of +2.00D and a back surface power of -8.25D. The corrective power is
    a. -8.25D
    b. -5.75D
    c. +2.00D
    d. -6.25D

7. What is the best base curve for a -3.75D lens?
    a. +4.00
    b. +2.00
    c. -4.00
    d. -2.00

8. Using the prescription +2.00 -1.50 X 45, what is the power of the lens at the 90th meridian?
    a. +0.50
    b. +2.00
    c. +1.25
    d. -0.50

9. How much cylinder power is in effect at the specified axis?
    a. 0%
    b. 25%
    c. 50%
    d. 100%

10. How much cylinder power is in effect 90 degrees away from the specified axis?
    a. 0%
    b. 50%
    c. 25%
    d. 100%

11. A plus lens
    a. diverges light
    b. converges light
    c. is two prisms placed apex to apex
    d. is concave

12. A minus lens
    a. is thick in the center
    b. converges light
    c. is thin in the center
    d. is two prisms placed base to base

13. Transpose the following prescription: -0.75 +3.00 X 180
    a. +2.25 -3.00 X 180
    b. -0.75 -3.00 X 090
    c. +2.25 +3.00 X 180
    d. +2.25 -3.00 X 090

14. Using the prescription -1.00 -1.50 X 90, what is the power of the lens at the 180th meridian?
    a. -2.50
    b. -1.00
    c. -0.50
    d. -1.50

15. What is the best base curve for a +2.50D lens?
    a. +8.00
    b. +6.00
    c. +10.00
    d. +4.00

16. Eyeglass prescription powers are written in _____.
    a. Axis
    b. Prisms
    c. diopters
    d. degrees

17. Axis is _____.
    a. a notation of position
    b. a notation of power on a lens
    c. always greater than 180 degrees
    d. used on spherical Rx's

18. To switch between minus and plus cylinder forms we use _____.
    a. cylinder conversion
    b. the cylinder powers formula
    c. transposition
    d. degree conversion

19. Plus lenses _____ and minus lenses _____.
    a. magnify, minify
    b. Minify, magnify
    c. Neutralize, verify
    d. Myopia, hyperopia

20. The spherical equivalent of the lens +1.00 +2.50 x 90 is:
    a. +1.50D
    b. +2.25D
    c. +2.50D
    d. +3.50D

21. If the prescription is O.D. +1.00 +2.50 x 45, what would be the total power at axis 90?
    a. +1.00D
    b. +2.00D
    c. +2.25D
    d. +2.SOD

22. Which of the following lenses has no power in the 90° meridian?
    a. +2.00 -2.00 x 90
    b. +2.00 +2.00 x 180
    c. +1.00-2.00 x 45
    d. +1.00+1.00x135

23. Given an Rx with all specifications equal but ground in material of different indices, which set of lenses will be the thinnest?
    a. Crown glass
    b. Polycarbonate
    c. CR-39
    d. Photo-Gray Extra

24. A lens having one concave and one convex surface is called a _____ lens.
    a. Biconvex
    b. Toric
    c. Biconcave
    d. Meniscus

25. The dioptric difference between the lenses for the prescription of O.D. +2.00 sph, O.S. +0.50 sph would be:
    a. 0.50D
    b. 1.00D
    c. 1.50D
    d. 2.00D

26. Astigmatism is corrected by a lens having:
    a. Plus power
    b. Minus power
    c. Cylinder power
    d. Prism Power

27. Given the prescription +1.00 +1.00 axis 90, how much of the +1.00 cylinder is in effect at axis 90 (the vertical meridian of the lens)?
    a. 100%
    b. 90%
    c. 50%
    d. 0%

28. A myope always has in his or her prescription the following kind of power:
    a. Minus power
    b. Plus power
    c. Cylinder power
    d. Axis

29. A hyperope always has in his or her prescription the following power:
    a. Minus power
    b. Plus power
    c. Cylinder power
    d. axis

30. If a +10D lens is moved 5 mm nearer the eye, it will be about:
    a. 0.25D stronger plus
    b. 0.25D weaker plus
    c. 0.50D stronger plus
    d. 0.50D weaker plus

31. The relationship of front and back curvatures on a spectacle lens will determine:
    a. Refractive power
    b. Segment position
    c. Effective diameter
    d. Decentration

Chapter 4: LENS OPTIONS

1. Which material is known to have the best optical properties?
    a. Plastic
    b. Polycarbonate
    c. Crown glass
    d. Trivex

2. Which material is known for its superior impact resistance?
    a. Plastic
    b. Crown glass
    c. Polycarbonate
    d. High index material

3. AR coatings cause light incident upon the lens to be
    a. Reflected
    b. Enhanced
    c. Transmitted
    d. Absorbed

4. What lens treatment best reduces glare from water and road surfaces?
    a. AR
    b. Photochromic
    c. Polarized
    d. Dark tint

5. Which of the following lens materials requires a UV coating to protect from ultraviolet radiation?
    a. Polycarbonate
    b. Trixex
    c. Plastic
    d. All of the above

6. Multifocal lenses are generally used to correct for:
    a. Amblyopia
    b. Presbyopia
    c. Myopia
    d. Disentery

7. The process used to reduce the bottom thickness of a progressive lens is called
    a. Fining
    b. Slab off
    c. Prism thinning
    d. Degeneration

8. A slab off is used to compensate for differences in induced prism between the eyes caused by
    a. Anisometropia
    b. Presbyopia
    c. Amblyopia
    d. Too much difference between the patient PD and the frame PD

9. Cataract surgery removes the crystalline lens of the eye causing the patient to lose the ability to focus. This condition is known as
    a. Anisometropic
    b. Antimetropic
    c. Aphakic
    d. Presbyopic

10. The refractive index of CR-39 is:
    a. 1.523
    b. 1.498
    c. 5.123
    d. 3.250

11. "Plastic" lenses are made of a hard resin material known as:
    a. Cellulose acetate
    b. CR-49
    c. PMMA
    d. CR-39

12. 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

13. Multifocal height is usually determined by measuring from the:
    a. Lower edge of the lens
    b. Lower edge of the frame
    c. Upper edge of the lens
    d. Upper edge of the frame

14. Trifocals are most generally prescribed when the patient is:
    a. Has double vision
    b. A presbyope
    c. About 45 years old
    d. An advanced presbyope

15. Bifocals are used to correct for a condition called:
    a. Myopia
    b. Presbyopia
    c. Anisometropia
    d. Emmetropia

16. Which one of the following lens materials is "generally" thought to provide the best impact resistance for children's eyewear?
    a. Heat treated crown glass
    b. Polycarbonate
    c. CR-39
    d. Chem—treated crown glass

17. What is aphakia?
    a. the presence of refractive error
    b. the presence of a cataract
    c. the absence of the crystalline lens
    d. the absence of accommodation

Chapter 5: FRAMES

1. Patient pupillary distances (PD's) are taken in two ways ____.
    a. monocularly and binocularly
    b. single vision and double vision
    c. reflex and standard
    d. dotted and spotted

2. A _____ PD is given as one number.
    a. monocular
    b. Reflex
    c. Dotted
    d. Binocular

3. What does the OC in OC height stand for?
    a. Optical Center
    b. Ophthalmic Center
    c. Office Center
    d. Ocular Cornea

4. In what year did the Optical Manufacturers Association adopt the Boxing System to provide a standard for frame and lens measurements?
    a. 1964
    b. 1971
    c. 1983
    d. 1962

5. Which of the following is not an attribute of Monel?
    a. Economical
    b. Can be easily soldered
    c. Hypo-allergenic
    d. Easy to adjust

6. The "A" measurement of a lens is:
    a. The horizontal line that runs through the vertical center of the frame
    b. The shortest distance between the nasal edges of each lens
    c. Twice the distance of the lenses furthest edge of the lens shape
    d. The horizontal distance between the vertical sides of the box

7. Which is an advantage of a Titanium frame?
    a. 100% corrosion resistant
    b. Easy to adjust
    c. Returns to original shape after being bent
    d. Will dry out and become brittle

8. For cosmetic reasons, it is best to pick a frame that:
    a. Has a frame PD wider than the patients
    b. Has a frame PD narrower than the patients
    c. Positions the eyes slightly above the center horizontal plane
    d. Has a frame PD that matches the patients.

9. There are two kinds of frame materials ___ and ____.
    a. hard, soft
    b. metals, plastics
    c. round, square
    d. rigid, flexible

10. There are three common types of lens mountings:
    a. Round, Square, Open
    b. Screw, Glue, Pressed
    c. Drill, Pressed, Round
    d. Bevel-Bezel, Semi-Rimless, Three-Piece

11. Frames are measured using the following Boxing System points:
    a. A, C, BRT, ED
    b. B, C, DBL, ED
    c. A, B, DBL, ED
    d. A, B, C, ED

12. Outward inclination of the bottom of the framed lenses is called _____ tilt.
    a. Pantoscopic
    b. Periscopic
    c. Retroscopic
    d. Retractive

13. The type of bridge on a plastic frame designed to rest entirely on nose pads is the _____ .
    a. Full saddle
    b. Semi-saddle
    c. Sculptured
    d. Keyhole

14. If the eyewires touch the cheeks, the adjustment to take care of this condition would be:
    a. Spread pads apart
    b. Bend pad arms up
    c. Increase pantoscopic tilt
    d. Decrease pantoscopic tilt

15. If the top of the front is pressing against the brow, the adjustment to correct the condition would be:
    a. Lengthen the pad arms
    b. Shorten the pad arms (not sure of this one the wording is too vague)
    c. Decrease pantoscopic tilt
    d. Shorten the temple length

16. When adjusting the frame, the front can be lowered by using the following adjustment:
    a. Using more pantoscopic tilt
    b. By bringing the pads closer together
    c. By bending the pad arms down
    d. By spreading the pads further apart

17. To relieve excessive pressure causing soreness at the back edge of the nose pads, a good adjustment would be:
    a. Bring pads closer together
    b. Flare pads out more (spread back edge apart more)
    c. Raise the pad arms
    d. Drop the pad arms

18. If the pad arms are bent up and the pads realigned, this adjustment will:
    a. Raise the front
    b. Drop the front
    c. Give front a retroscopic tilt
    d. Push the front out

19. If the right temple is angled down, this adjustment will:
    a. Lower the right side of the front
    b. Loosen the right temple tension
    c. Push the right side of the front out
    d. Raise the right side of the front

20. If the pad arms are lengthened, this adjustment will:
    a. Raise the front
    b. Lower the front
    c. Bring the front in closer
    d. Push the front out more

21. If the pads are brought closer together, this adjustment will.
    a. Raise the front
    b. Drop the front
    c. Set the front closer to the face
    d. Loosen the temple tension

22. If the right temple is angled out, this adjustment will:
    a. Bring the right side of the front toward the right eye
    b. Push the right side of the front away from the right eye
    c. Raise the right side of the front
    d. Lower the right side of the front

23. To relieve tension on both ears, a good adjustment would be to:
    a. Lengthen both temples
    b. Shorten both temples
    c. Lengthen both pad arms
    d. Bring both pads closer together

24. When a frame is said to have pantoscopic tilt, the following condition is meant:
    a. The bottoms of the eyewires are out further than the top
    b. The bottoms of the eyewires are in closer than the top
    c. The bridge of the frame is out further than the endpieces
    d. The bridge of the frame is in closer than the endpieces

25. When a frame is said to have retroscopic tilt, the following condition is meant:
    a. The bottoms of the eyewires are out further than the top
    b. The bottoms of the eyewires are in closer than the top
    c. The bridge of the frame is out further than the endpieces
    d. The bridge of the frame is in closer than the endpieces

26. "Bowing" temples is an expression referring to:
    a. Bending temples down
    b. Bending temples up
    c. Angling temples out
    d. Curving temples around the head

27. To adjust the frame so it sits lower on the face, bend the pad arms _____ .
    a. away from the frame front
    b. closer to the frame front
    c. closer together
    d. farther apart

Chapter 6: TOOLS

1. Internal lens stress can be detected using a
    a. Lensometer
    b. Distometer
    c. Polariscope
    d. Pedometer

2. A lensometer is used for measuring
    a. Sphere Power
    b. Cylinder Power
    c. Prism
    d. All of the above

3. Prism is read in lensometer using the
    a. Power drum
    b. Lens holder
    c. Reticle
    d. Spotting device

4. Vertex distance is measured using a
    a. Lensometer
    b. Polariscope
    c. Vertometer
    d. Distometer

5. A lensomter reticle is divided in quadrants to measure the
    a. Cylinder axis
    b. Direction of the prism
    c. Sphere power
    d. None of the above

6. Lens calipers are commonly used to measure:
    a. Lens diameter
    b. Bifocal height
    c. Index of refraction
    d. Lens thickness

7. A pupillometer is used to measure the:
    a. Diameter of the pupil
    b. Radius of the pupil
    c. Interpupillary distance
    d. Height of the pupil

Chapter 7: REGULATIONS AND STANDARDS

1. The private agency whose function is to set commercial and industry standards is
    a. ASTM
    b. ANSI
    c. ASCII
    d. OSHA

2. The ANSI document covering ophthalmic standards
    a. Z801
    b. Z901
    c. Z80
    d. STM801

3. Which of the following categories of lenses are not exempt from drop ball testing?
    a. Lenticular
    b. Myodisc
    c. Aspheric
    d. Biconcave

4. According to ANSI standards, a lens with 0.50 D of cylinder must have an axis within
    a. 14 degrees
    b. 7 degrees
    c. 5 degrees
    d. 3 degrees

5. The governmental agency established for the purpose of reducing deaths, injury, and illness in the workplace is
    a. ASTM
    b. ANSI
    c. OSHA
    d. FDA

6. The ASTM institute sets standards for which of the following ophthalmic products:
    a. Industrial safety eyewear
    b. Over the counter reading glasses
    c. Sports eyewear
    d. Dress Eyewear

7. In drop ball testing a ____ ball is dropped from ____ on to the front surface of a lens.
    a. 5/8 in, 50 in
    b. 5/8 cm, 50cm
    c. 4/5 cm, 45cm
    d. 1 in, 50cm

8. Duty to warn:
    a. Requires the lab to tell the opticians if the lenses passed the drop ball test.
    b. Requires the patient to tell the optician when they use their glasses outside of the acceptable norm.
    c. Requires opticians to warn patients of significant risks in certain aspects of lenses and frames.
    d. Requires an optician to warn a patient if they are not certified.

BONUS QUESTIONS

1. Given an Rx of: Plano +1.00 x 090, when ground, the resulting lens is prescribed for which of the following conditions?
    a. Simple myopic astigmatism
    b. Simple hyperopia
    c. Simple hyperopic astigmatism
    d. Compound hyperopic astigmatism

2. If the pupillary distance is measured while the patient is focusing on a point 16 inches in front of his eyes, the P.D. measured is known as the _____ P.D.
    a. Distance
    b. Intermediate
    c. Near
    d. Most accurate

3. The optical cross is a graphic representation used to show the _____ of a lens.
    a. Surface curvature
    b. Corrected curves
    c. Compensated vertex
    d. Meridian powers

4. You are fitting a patient with a Titan-10 frame, 24 DBL, 44 eye size, and 5V2 inch skull temples. The distance P.D. is only 62 mm. If by some unfortunate error the lenses are NOT decentered at all, how much prism is created in each eye? Rx O.U.-2.25-1.50x45
    a. 0.9 Δ B.I.
    b. 0.5 Δ B.I.
    c. 0.9 Δ B.O.
    d. 0.5 Δ B.O.

5. A characteristic most single vision CR-39 lens series have in common is:
    a. Plus cylinder form
    b. A square molded shape
    c. Minus cylinder form
    d. Minus base curves

6. As the pantoscopic angle is increased:
    a. The spherical equivalent is decreased
    b. The optical centers are effectively raised
    c. The spherical equivalent is increased
    d. The optical centers should be lowered

7. A lens of -2.00 +2.00 x 90 power corrects _____ .
    a. Simple myopic astigmatism
    b. Simple hyperopic astigmatism
    c. Simple myopia
    d. Compound myopic astigmatism

8. The vertical difference in power between lenses in the following Rx is: O.D.-1.00 +0.50 x 045 O.S. -1.00 +0.50 x 090
    a. 0.75D sph
    b. 0.50Dsph
    c. 0.25D sph
    d. No difference

9. A ptosis crutch is used to give support to:
    a. Lower lid
    b. Upper lid
    c. Nasal bridge
    d. Nose pads

10. A patient comes in with a prescription requiring a large amount of plus power (+12.50 diopters) and with a notation Vertex Distance 12 mm. You find that when fitted with a frame, the lens will set 14 mm from his eye. What change will be necessary in the lens to be ordered?
    a. More plus sphere power
    b. Less plus sphere power
    c. More minus cylinder power
    d. Less minus cylinder power

11. If the lenses of a patient wearing -15.00 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

12. Most commonly, opticians use a Geneva lens measure to:
    a. Measure lens thickness
    b. Measure segment height
    c. Measure lens diameter
    d. Measure lens base curve

REVIEW QUESTIONS ANSWER KEY

Q.	Ch. 1	Ch. 2	Ch. 3	Ch. 4	Ch. 5	Ch. 6	Ch. 7	Bonus
1	B	D	D	C	A	C	B	C
2	C	A	C	C	D	D	C	C
3	B	C	A	C	A	C	C	D
4	D	C	B	C	D	D	B	A
5	C	B	A	C	C	B	C	C
6	A	A	D	B	D	D	C	C
7	B	B	A	C	A	C	A	A
8	D	A	C	A	D		C	C
9	A	B	A	C	B			B
10	A	C	D	B	D			B
11	C	A	B	D	C			A
12	A	B	C	B	C			D
13	D	D	D	A	D			
14	B	C	A	D	D			
15	B	D	A	B	A			
16	C	A	C	B	D			
17	B		A	C	B			
18	C		C		B			
19	C		A		D			
20	A		B		D			
21	B		C		A			
22	C		C		A			
23	A		B		A			
24	B		D		B			
25	B		C		A			
26	B		C		D			
27			D		D			
28			A					
29			B					
30			D					
31			A					

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