**Prisms – study group**

**A. Optics of prism:**

1. Image displacement of 1 prism diopter per 1 cm at 1 meter.
2. Three dimensional perceptual shifts; base expands space & apex constricts it.

Optical changes created by prism:

* Shift- image move towards apex, away from base.
* Curvature- extended surfaces may appear curved.
* Slant- extended surfaces may appear rotated.

Spatial perception:

1. Base creates space, as if things moved farther away.
2. Apex absorbs space, as if things moved closer.

Compensatory- moving the image to where the eyes are looking, reduces work.

Therapeutic- moving the image to where want the eyes to look, increases work.

Ie: prism flipper, BIM-BOP, prism bar, prism jumps/rotations

**B. Monocular**: base-in opens visual field, base-out constricts visual field.

Eso-tropia program- BI prism with tracking and focusing

**C. Binocular**: use compensatory lenses to encourage fusion lock, then reduce power until not needed.

* BO- for eso tendencies or convergence excess
* BI- for exo tendencies or convergence insufficiency
* BU- for toe walkers
* BD- for wheelchair bound patients

**D. Disassociating prisms**: goggles with BU/BD split prism or BI- 15^ to 20^ total.

Biocular activities -awareness of vision perception from each eye, helps with anti-

suppression.

**E. Yoked prisms**: prism goggles with bases in same direction.

Midline shift treatment or increasing awareness of visual shift.

**RVDC**- residual vergence demand criteria; for basic exo/eso- phorias with same turn at

near and far, divergence insufficiency and vertical-phoria.

30^-20^ = 10^-15^ 20^-6^ = 4^-6^ 10^-3^ = 2^-4^