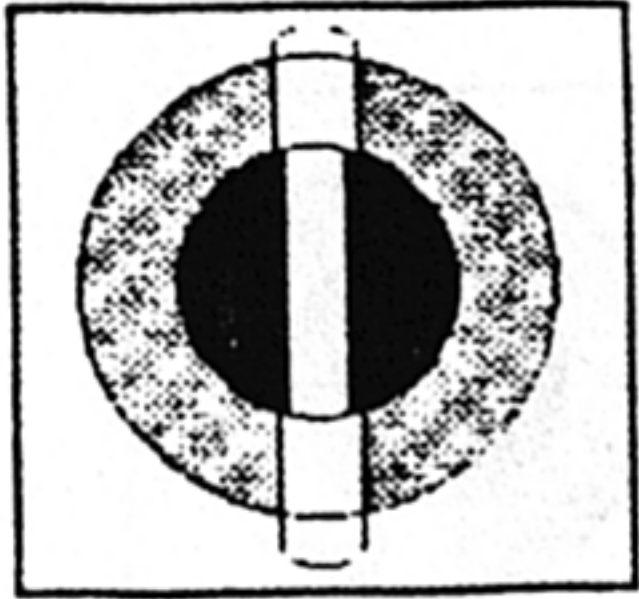


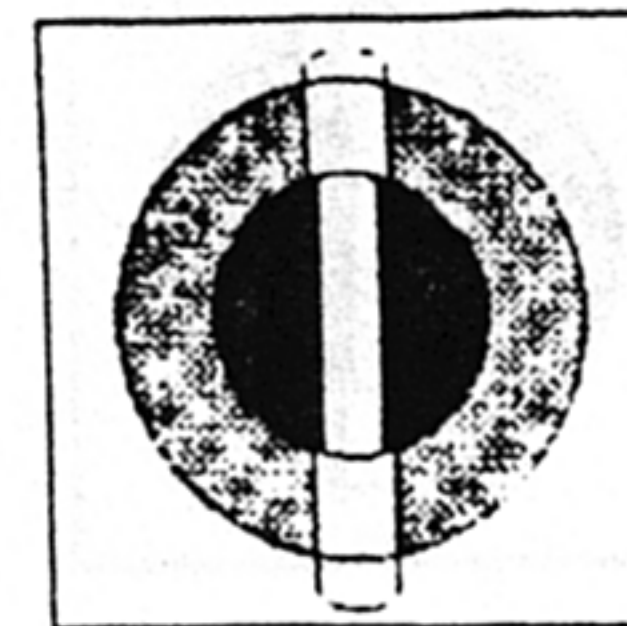


Practice Exercises

Before completing the following practice exercises, we need to make the following observation for fitting rigid contact lenses according to the Dyer nomogram. That is the following: **flatter base curves call for lenses with larger diameters, while steeper base curves call for lenses with smaller diameters.** This would stand to reason since larger corneas are generally flatter while smaller corneas are steeper in curvature.

Using the data found in the following exercises, indicate the lens parameters by filling in the table on the opposite page. Refer to the charts on pages 12 and 13 as well as the vertex distance table found in part 2 of this course. The answers may be found on page 30.

- | | | |
|-----|--|-------------------------|
| #1) | Spectacle Rx: -4.75 - 0.50 x 170
K: 45.50/46.00 | Vertex distance = 12 mm |
| #2) | Spectacle Rx: -2.50 - 0.25 x 045
K: 43.00/43.25 | Vertex distance = 8 mm |
| #3) | Spectacle Rx: +3.50 + 1.50 x 90
K: 46.75/48.25 | Vertex distance = 10 mm |
| #4) | Spectacle Rx: +2.75 - 0.75 x 30
K: 44.37/45.12 | Vertex distance = 12 mm |
| #5) | Spectacle Rx: -8.75 - 2.25 x 65
K: 41.25/43.50 | Vertex distance = 8 mm |
| #6) | Spectacle Rx: -5.50 + 1.75 x 120
K: 43.00/44.75 | Vertex distance = 10 mm |
| #7) | Spectacle Rx: +3.75 + 0.50 x 135
K: 47.75/48.25 | Vertex distance = 12 mm |



Part 3: Fitting & Verification

Practice Exercises

Exercise #	1	2	3	4	5	6	7
Total Power at Corneal Plane (D) *	-4.50	-2.50	+5.00	+2.75	-8.25	3.75	-4.50
Base Curve (D)	45.75	43.25	41.5	45.00	42.25		
Power of Tear Lens (D)	+0.25	+1.25	+1.75	+1.63	+1.00		
Power of Contact Lens (D)	-4.75	-2.75	+4.25	2.12	-9.25		
Overall Lens diameter (mm)	8.1	8.6	7.9	8.2	8.8		
Optical Zone (mm)	6.7	7.2	6.7	6.8	7.3		
Peripheral Curve (D)	42.00	39.5	43.5	41.5	38.5		
Center Thickness (mm) **	0.10	.14	.21	.21	.10		

* Round off power to nearest 0.25 diopter

** Use closest diameter indicated on thickness chart.