

SUMMARY SHEET

EXPERIMENT 1

1. FOR WATER AND RED LIGHT AT EXTREME END OF SPECTRUM

$k = 1$	First Order Rainbow	$\theta_1 = 129.0^\circ$	$\phi_1 = 137.0 \pm 5.0^\circ$
$k = 2$	Second Order Rainbow	$\theta_2 = 129.0^\circ$	$\phi_2 = 231.0 \pm 3.0^\circ$
$k = 5$	Fifth Order Rainbow	$\theta_5 = 126.0^\circ$	$\phi_5 = 486.0 \pm 4.0^\circ$

2. LIQUIDS A AND B USING SECOND ORDER RAINBOWS

For Liquid A	$\theta_2 = 105.0^\circ$	$\phi_2 = 255.0 \pm 3.0^\circ$
For Liquid B	$\theta_2 = 89.5^\circ$	$\phi_2 = 270.5 \pm 3.0^\circ$
For $n = 1$	$\theta_2 = 0.0^\circ$	$\phi_2 = 0.0^\circ$
Gradient of graph		$= 0.84 \pm 0.07$
Extrapolated, $n = 2,$	$\theta_2,$ value of ϕ	$= 304 \pm 25^\circ$

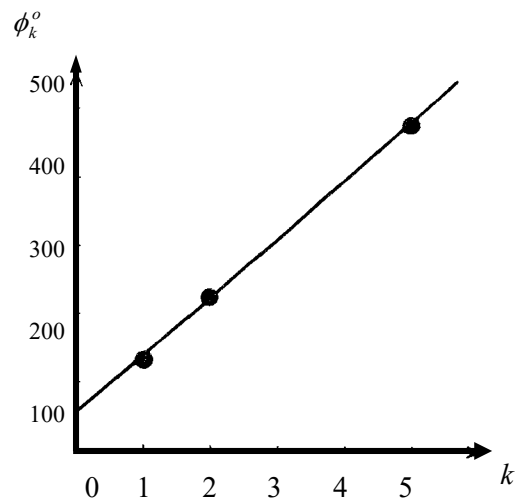


Figure E 1.1.

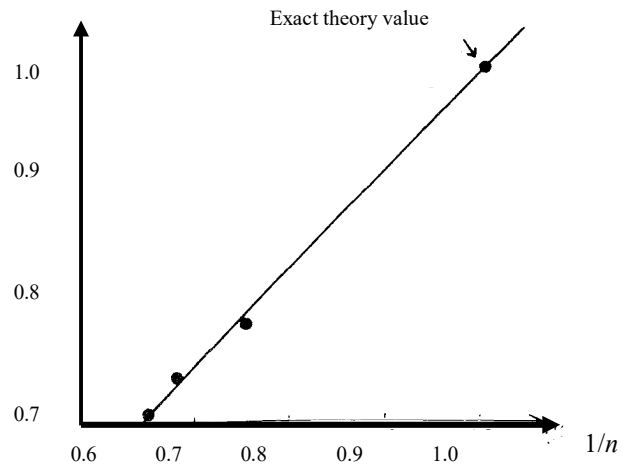


Figure E 1.2