

## 6.5 - Assessing Normality: Normal-Quantile Plots

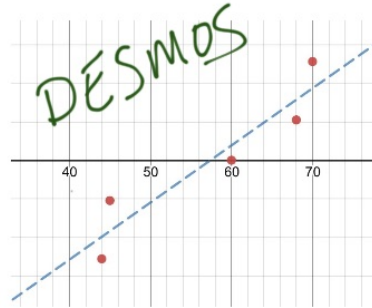
**EXAMPLE 2:** Create a normal-quantile plot and assess the normality of the data:

44 70 68 60 45

$$\textcircled{1} \quad 44 \ 45 \ 60 \ 68 \ 70 \quad n=5 \text{ so } \frac{1}{2n} = \frac{1}{10} \text{ use } \frac{1}{10}, \frac{3}{10}, \frac{5}{10}, \frac{7}{10}, \frac{9}{10}$$

$x$	$P$	$z$ -score
44	0.1	$\text{invNorm}(0.1) = -1.282$
45	0.3	-0.524
60	0.5	0
68	0.7	0.524
70	0.9	1.282
$L_1$		$L_2$

Plot the points:

 $(44, -1.282)$   $(45, -0.524)$  $(60, 0)$   $(68, 0.524)$  $(70, 1.282)$ Does not look normal at all!