

The following are the costs of two potential designs of a hospital wing.

	Design A	Design B
construction cost	\$10,000 K	\$15,000 K
MBO cost	\$35 K/year	\$55 K/year
patient usage cost	\$450 K/year	\$200 K/year

DC = DAW OF Cost

life = 30 year      MARR = 5%

$$= -(10,000 (A/P, 5\%, 30) + 35) \\ + (5,000 (A/P, 5\%, 30) + 55) \\ = \$345.25/\text{year}$$

$$\Delta B = 450 - 200 = 250$$

$$B/C = \frac{250}{345.25} = 0.72 < 1$$

B not better than A.