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1 A: System A:

Weight	Cost	
0.95	$6 \times 10^{-9}$	$5.7 \times 10^{-9}$
$0.05 \times 0.98$	$100 \times 10^{-9}$	$4.9 \times 10^{-9}$
$0.05 \times 0.02$	$8 \times 10^{-5}$	$8 \times 10^{-6}$
		$8.01 \times 10^{-6} / 2 \times 10^{-9} = 4005.3$

System B:

Weight	Cost	
0.90	$6 \times 10^{-9}$	$5.4 \times 10^{-9}$
$0.1 \times 0.98$	$100 \times 10^{-9}$	$9.8 \times 10^{-9}$
$0.1 \times 0.02$	$8 \times 10^{-5}$	$1.6 \times 10^{-5}$
		$1.602 \times 10^{-5} / 2 \times 10^{-9} = 8007.6$

1 B: System A

Weight	Cost	
0.95	$10 \times 10^{-9}$	$9.5 \times 10^{-9}$
$0.05 \times 0.98$	$100 \times 10^{-9}$	$4.9 \times 10^{-9}$
$0.05 \times 0.02$	$1 \times 10^{-5}$	$1 \times 10^{-6}$
		$1.014 \times 10^{-6} / 2 \times 10^{-9} = 507.2$

System B

Weight	Cost	
0.9	$10 \times 10^{-9}$	$9 \times 10^{-9}$
$0.1 \times 0.98$	$100 \times 10^{-9}$	$9.8 \times 10^{-9}$
$0.1 \times 0.02$	$1 \times 10^{-3}$	$2 \times 10^{-7}$
		$2.01 \times 10^{-6} / 2 \times 10^{-9} = 1005$

1 C: System A:

$$0.6 \times 8.01 \times 10^{-6} + 0.4 \times 1.104 \times 10^{-6} = 5.2 \times 10^{-6} \quad \left[ \frac{5.2 \times 10^{-6}}{1.12 \times 10^{-5}} \right] =$$

System B:

$$0.6 \times 1.00 \times 10^{-6} + 0.4 \times 2.01 \times 10^{-6} = 1.04 \times 10^{-5} \quad \left[ \frac{1.04 \times 10^{-5}}{1.12 \times 10^{-5}} \right] =$$

1 D: System A:

$$0.75 \times 1 + 0.25 \times \left( \frac{5.2 \times 10^{-6}}{1.12 \times 10^{-5}} \right) \times 1.12 \times 10^{-5} = 652.265 =$$

System B

$$0.8 \times 1 + 0.2 \times \left( \frac{1.04 \times 10^{-5}}{1.12 \times 10^{-5}} \right) \times 1.12 \times 10^{-5} = 1042.46 =$$