

167. The repair costs for boats in a marina have the following characteristics:

Boat type	Number of boats	Probability that repair is needed	Mean of repair cost given a repair	Variance of repair cost given a repair
Power boats	100	0.3	300	10,000
Sailboats	300	0.1	1000	400,000
Luxury yachts	50	0.6	5000	2,000,000

At most one repair is required per boat each year.

The marina budgets an amount, Y , equal to the aggregate mean repair costs plus the standard deviation of the aggregate repair costs.

Calculate Y .

- (A) 200,000
- (B) 210,000
- (C) 220,000
- (D) 230,000
- (E) 240,000