

The first step is to find the derivative of the function $y = 420 - 20x + 0.002x^2$.
 The derivative is $y' = -20 + 0.004x$.
 The second step is to find the value of x that maximizes the profit.
 This is done by setting the derivative equal to zero and solving for x .
 $-20 + 0.004x = 0$
 $0.004x = 20$
 $x = 5000$

Measures

The first measure is the profit function $P(x) = 420x - 20x^2 + 0.002x^3$.
 The second measure is the revenue function $R(x) = 420x$.
 The third measure is the cost function $C(x) = 20x^2 - 0.002x^3$.
 The fourth measure is the profit function $P(x) = R(x) - C(x)$.
 The fifth measure is the profit function $P(x) = 420x - 20x^2 + 0.002x^3$.
 The sixth measure is the profit function $P(x) = 420x - 20x^2 + 0.002x^3$.
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 The eighth measure is the profit function $P(x) = 420x - 20x^2 + 0.002x^3$.
 The ninth measure is the profit function $P(x) = 420x - 20x^2 + 0.002x^3$.
 The tenth measure is the profit function $P(x) = 420x - 20x^2 + 0.002x^3$.

7,020 (n = 6,961), 48% (n = 3,361), 51% (n = 3,579), <1% (n = 22). G (n = 22). C (n = 22). D (n = 22).

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A (n = 3,038) (n = 3,215) (n = 2) (97.1% (92.0% (7.2% (2.7% (0.2%

Table 1. (N = 6,940).

	(N = 3,361)		(N = 3,579)	
	%	(n)	%	(n)
	74.7	(2,502)	75.0	(2,678)
	3.3	(111)	4.4	(158)
	5.1	(171)	5.1	(180)
	4.2	(141)	4.0	(142)
	8.9	(297)	8.0	(284)
	0.0	(1)	0.2	(7)
	3.8	(126)	3.4	(121)
	15.5	(520)	14.5	(517)
	25.5	(857)	24.3	(869)
	23.5	(789)	22.5	(804)
	35.5	(1,195)	38.8	(1,388)
	91.2	(3,063)	92.3	(3,302)
	8.9	(298)	7.7	(276)
	45.1	(1,508)	45.5	(1,627)
	53.3	(1,708)	51.9	(1,853)
	1.5	(49)	2.4	(85)
	0.2	(6)	0.2	(8)
	89.3	(2,988)	88.1	(3,148)
	6.0	(199)	1.0	(36)
	2.6	(87)	6.7	(238)
	0.9	(30)	1.4	(50)
	1.3	(42)	2.9	(103)
	36.6	(1,227)	34.2	(1,222)
	17.7	(595)	10.2	(364)
	9.7	(326)	11.2	(400)
	30.7	(1,029)	37.5	(1,339)
	4.2	(142)	5.5	(197)
	1.1	(37)	1.3	(45)

Note. *p < .05.

F (<1%), (47.5% (54.6% (19.3% (21.4% (18.4% (14.2% (12.1% (N = 364) (7.0% (N = 225) (74.8% (88.3% (18.5% (8.9% (<3% (<2% (0.2% (N = 8)

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A (n = 3,038) (n = 3,215) (n = 2) (97.1% (92.0% (7.2% (2.7% (0.2%

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\rightarrow $h_{\text{res}}(\mathbf{e}_i) = \mathbf{e}_i - (\mathbf{e}_i \cdot \mathbf{y}) \mathbf{y}$. A \mathbf{y} \perp \mathbf{y} \Rightarrow $\mathbf{y} \cdot \mathbf{y} = 1$.
 $\mathbf{e}_i \cdot \mathbf{y} = \mathbf{e}_i \cdot (\cos \theta \mathbf{e}_1 + \sin \theta \mathbf{e}_2) = \cos \theta$
 $\mathbf{e}_1 \cdot \mathbf{y} = \cos \theta$, $\mathbf{e}_2 \cdot \mathbf{y} = \sin \theta$.
 $\mathbf{h}_{\text{res}}(\mathbf{e}_1) = \mathbf{e}_1 - \cos^2 \theta \mathbf{e}_1 - \sin^2 \theta \mathbf{e}_2$
 $\mathbf{h}_{\text{res}}(\mathbf{e}_2) = \mathbf{e}_2 - \cos^2 \theta \mathbf{e}_1 - \sin^2 \theta \mathbf{e}_2$

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