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### Question: Problem 5-3 Determine break-even point under varying assu...

Problem 5-3 Determine break-even point under varying assumptions (L.O. 3, 4)

The management of Bootleg Company wants to know the break-even point for its new line of hiking boots under each of the following independent assumptions. The selling price is \$50 per pair of boots unless otherwise stated. (Each pair of boots in one unit.)

- Fixed costs are \$300,000; variable cost is \$30 per unit
- Fixed costs are \$300,000; variable cost is \$20 per unit
- Fixed costs are \$250,000; variable cost is \$20 per unit
- Fixed costs are \$250,000; selling price is \$40; and variable cost is \$30 per unit

Compute the break-even point in units and sales dollars for each of the four independent cases.

Problem 5-4 Determine the margin of safety (L.O. 5)

Refer to Problem 5-3. Bootleg Company's sales are \$1,100,000. Determine the margin of safety in dollars for cases (a) through (d).

Problem 5-5 Compute the level of sales dollars needed to achieve a specified level of income (L.O. 6)

Using the data in Problem 5-3 (a through d), determine the level of sales dollars required to achieve a net income of \$125,000.

### Expert Answer

Anonymous answered this  
863 answers

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		SITUATION 1	SITUATION 2	SITUATION 3	SITUATION 4
a	SELLING PRICE PER UNIT	50	50	50	40
b	VARIABLE COST PER UNIT	(30)	(20)	(20)	(30)
c = a-b	CONTRIBUTION PER UNIT	20	30	30	10
d = (c/a)*100	PROFIT VOLUME RATIO	40%	60%	60%	25%
e	FIXED COST	300000	300000	250000	250000
f = (e/c)	BREAK EVEN POINT (UNITS)	15000	10000	8333	25000
g = (e/d)	BREAK EVEN POINT (SALES)	750000	500000	416667	1000000

**Break even point (units) = Fixed Cost / Contribution per unit**

**Break even point (sales) = Fixed Cost / Profit Volume Ratio**

		SITUATION 1	SITUATION 2	SITUATION 3	SITUATION 4
a	SALES	1100000	1100000	1100000	1100000
b	BREAK EVEN POINT (SALES)	750000	500000	416667	1000000

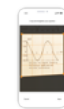
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Margin of Safety = Sales - Break Even Sales

(Note: Break Even sales calculated in Table 1 above )

		SITUATION 1	SITUATION 2	SITUATION 3	SITUATION 4
a	FIXED COST	300000	300000	250000	250000
b	EXPECTED PROFIT	125000	125000	125000	125000
c	PROFIT VOLUME RATIO	40%	60%	60%	25%
d = (a+b)/c	LEVEL OF SALES REQUIRED	1062500	708333	625000	1500000

Level of Sales required = (Fixed Cost + Expected Profit) / Profit Volume Ratio

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### Up next for you in Accounting

The management of Bootleg Company wants to know the

The management of Bootleg Company wants to know the break-even point for its new line of fishing boats under each of the following **independent** assumptions. The selling price is \$30 per pair of boots, unless otherwise noted. (Each pair of boots is one unit).

**Required:**

Compute the break-even point in units and sales dollars for each of the four independent cases.

a. Fixed costs are \$300,000; variable cost is \$10 per unit.  
Break-even units: \_\_\_\_\_ Break-even sales dollars: \_\_\_\_\_

b. Fixed costs are \$300,000; variable cost is \$20 per unit.  
Break-even units: \_\_\_\_\_ Break-even sales dollars: \_\_\_\_\_

c. Fixed costs are \$200,000; variable cost is \$20 per unit.  
Break-even units: \_\_\_\_\_ Break-even sales dollars: \_\_\_\_\_

[See answer](#)

XYZ Company prices its products by adding 30% to its cost. XYZ anticipates sales of \$715,000 in March, \$728,000 in April, and \$624,000 in May. XYZ's

[See answer](#)

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A: [See answer](#) 100% (1 rating)

Q: A tank has a hole in the bottom with a cross-sectional area of 0.0025 m and an inlet on one side with a cross-sectional area of 0.0025 m<sup>2</sup>, as shown in Fig. 6. The cross-sectional area of the tank is 0.1 nr. The velocity of the liquid flowing out of the bottom hole is  $V = \sqrt{2gh}$  where h is the height of the water surface in the tank above the outlet. At a certain time the surface...

A: [See answer](#) 94% (16 ratings)

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