

Name: \_\_\_\_\_

## FIGURING BREAKEVEN

A breakeven is a budget that tells a producer what they need to sell their crop for to pay all of their expenses. This is the price point where their expenses are covered, but there is no extra revenue or profit. So how do farming operations calculate breakeven? Review the example below on figuring breakeven. Then, do the math on the next page to find the breakeven cash amount and the breakeven with margin.

To figure a farmer breakeven, there are several figures you need to know.

- ✓ TOTAL EXPENSES
- ✓ ESTIMATED YIELD
- ✓ TARGET PROFIT MARGIN

### FIGURE THE BREAKEVEN EXAMPLE

Expenses	\$/Acre
Land	\$275
Taxes	\$40
Crop Insurance	\$30
Liability Insurance	\$5
Fertilizer	\$180
Chemical	\$45
Machinery	\$75
Seed	\$90
Fuel	\$25
Irrigation	\$50
Repair	\$5
Drying	\$5
Storage	\$10
Utilities	\$10
Operating Interest	\$25
<b>Total Expenses</b>	<b>\$870</b>

Breakeven Cash (Expenses Divided by Yield)	
Total Expenses	\$870
Estimated Yield	250 bu/acre
<b>Breakeven Cash</b>	<b>\$3.48</b>

Next, take the total expenses and divide it by the estimated yield per acre to get the breakeven.

$$\$870.00 / 250 = \$3.48$$

Breakeven with Margin (Breakeven Cash x Target Profit Margin)	
Breakeven Cash	\$3.48
Target Profit Margin	10%
<b>Breakeven with Margin</b>	<b>\$3.83</b>

Finally, if a farmer wants to know how much he should sell his grain for in order to make a profit, he must first choose his target profit margin. From there, he will need to multiply his breakeven cash amount by the target margin and then add it to the original breakeven amount.

$$(\$3.48 \times 0.10) + \$3.48 = \boxed{\$3.83}$$

Add all the expenses for the total amount per acre. The total for this example is \$870.00.

**In this example, this farmer must sell their grain for at least \$3.48/bu in order to pay for all their expenses. If they want to make a profit of 10%, they must sell for \$3.83.**



## DO THE MATH: FIGURE THE BREAKEVEN

**1** Allie wants to figure her breakeven to help her decide what she needs to sell her new crop beans at this year. She has listed out all of her expenses per acre and wants her target profit margin to be 15%. Based on the last three years of data, she believes she will yield 75 bu/acre on this year's crop. Help Allie figure her breakeven and the total amount she needs to sell her beans at in order to reach her target profit margin. Show your work.

Expenses	\$/Acre
Land	\$275
Taxes	\$ 40
Crop Insurance	\$30
Liability Insurance	\$5
Fertilizer	\$60
Chemical	\$55
Machinery	\$65
Seed	\$70
Fuel	\$20
Irrigation	\$25
Repair	\$5
Drying	\$0
Storage	\$0
Utilities	\$10
Operating Interest	\$15

Breakeven Cash	
Estimated Yield	75 bu/acre

Breakeven with Margin	
Target Profit Margin	15%

Breakeven : \_\_\_\_\_

Breakeven with Margin : \_\_\_\_\_



## DO THE MATH: FIGURE THE BREAKEVEN

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Fuel	\$20
Irrigation	\$25
Repair	\$5
Drying	\$0
Storage	\$0
Utilities	\$10
Operating Interest	\$15

Breakeven Cash	
Estimated Yield	75 bu/acre

Breakeven with Margin	
Target Profit Margin	15%

Breakeven :           **\$9.00**          

Breakeven with Margin :           **\$10.35**          

275	9	0.15	9.00
40	75   675	<u>x 9</u>	<u>+ 1.35</u>
30		1.35	10.35
5			
60			
55			
65			
70			
20			
25			
5			
0			
0			
10			
<u>+ 15</u>			
675			

