

Answer on Question #41034 - Economics - Economics of enterprise

A purely competitive wheat farmer can sell any wheat he grows for \$30 per bushel. His five acres of land show diminishing returns, because some are better suited for wheat production than others. The first acre can produce 1000 bushels of wheat, the second acre 900, the third 800, and so on.

1) How many bushels will each of the farmer's five acres produce?

Acre	Quantity	Total quantity	Revenue per acre	TR	MR
1 acre	1000 bushels	1000	30,000	30,000	-
2 acre	900 bushels	1900	27,000	57,000	30
3 acre	800 bushels	2700	24,000	81,000	30
4 acre	700 bushels	3400	21,000	102,000	30
5 acre	600 bushels	4000	18,000	120,000	30

2) How much revenue will each acre generate?

Revenue per acre =  $P \cdot Q$ ,  $P = \$30$

3) What are the TR and MR for each acre?

$TR = Q \cdot \text{Revenue per acre}$

$MR = (TR_2 - TR_1) / (Q_2 - Q_1) = P = \$30$