

ANSWER KEY COMPUTER APPLICATIONS

Name:	ANSWER KEY
School:	

Manure production and storage			
	Value	Units	Comment
Number of productive cows	100		From problem statement
Manure production	18	gallons per day per cow	From Table 2 Pm-1811
Total manure production	328,500	gallons per 1/2 year	Calculated for you
Total manure production	43,917	ft ³ per 1/2 year	Calculated for you
Depth of manure in storage tank	25.0	ft	From problem statement
Diameter of manure in storage tank	229.3	ft	Enter formula in cell B9

Nutrient production			
	Value	Units	Comment
Manure nitrogen (N)	25	lbs / 1000 gal	From Table 2 Pm-1811
Manure phosphorus (P ₂ O ₅)	12	lbs / 1000 gal	From Table 2 Pm-1811
Manure potassium (K ₂ O)	11	lbs / 1000 gal	From Table 2 Pm-1811
Amount of nitrogen (N) in full tank	8,213	lbs	Calculated for you
Amount of phosphorus (P ₂ O ₅) in full tank	3,942	lbs	Calculated for you
Amount of potassium (K ₂ O) in full tank	3,614	lbs	Calculated for you

Nitrogen value			
	Value	Units	Comment
Value of nitrogen (N)	\$0.20	\$ / lb	From problem statement
Value of manure in full tank as nitrogen	\$1,643	\$	Enter formula

Answer to the question
(change value of N to \$0.24/lb)

\$1,971