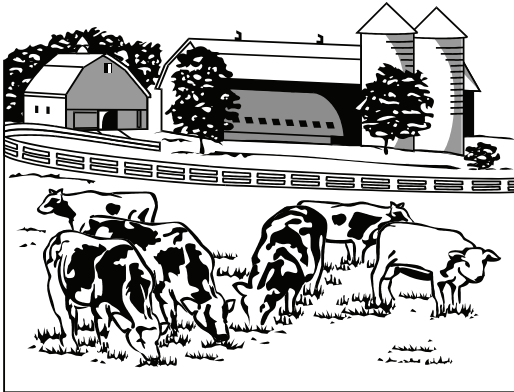


You are the Farmer

You are a no-till farmer in Michigan and usually plant soybeans, as well as corn. This year you make the decision to plant corn on all the ground you farm. Use the following information to complete the activity. You will have to round some answers to the nearest whole dollar, full container or full bag.



- Seed corn costs \$31 per acre.
- Fertilizer costs \$44 per acre.
- Fuel, lube, and electricity cost \$21 per acre.
- Herbicide costs \$82.20 for a 2.5-gallon container that treats 8 acres.
- Insecticide costs \$94 for a 50-pound bag. Fifty pounds treats 6.66 acres.
- Your farm is Michigan's average size of 268 acres.

1. You decide to plant your corn. How much will it cost to plant seed corn on all of your acres?

2. You need to purchase a new tractor and planter. The bank will loan you the money to buy the equipment, but you are required to make payments of \$18,500 every year for seven years. In addition, you have payments on previous purchases of \$5,500 per year. What is your total annual equipment cost for one year?

3. You need to put fertilizer on your corn crop. How much will this cost? _____
4. To keep weeds in your corn under control, you need to apply herbicide. How many containers will you need? _____ How much will this cost?

5. Most of your no-till corn is planted on last year's soybean ground and does not need any insecticide. Eighty acres of corn will be planted on last year's corn ground, and corn rootworms are a threat to the crop. You decide to apply an insecticide product. How many 50-pound bags will you need? _____ Calculate the cost.

6. It is time to pay your property taxes and insurance. The cost is \$28 per acre. What is the total cost on all 368 acres?

7. You rent your farmland for \$97 per acre. What is the total rent for your farm?

8. Your corn crop is great! You harvest 144 bushels per acre. What is the total number of bushels of corn harvested?
