

HAND VERSUS MACHINE LABOR ON AMERICAN FARMS, 1880

Crop	Hours Worked		Labor Cost	
	Hand	Machine	Hand	Machine
Wheat	61	3	\$3.55	\$0.66
Corn	39	15	\$3.62	\$1.51
Oats	66	7	\$3.73	\$1.07

1. What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

Scoring Guide

Score & Description

Complete

Response accurately describes the impact of farm machinery on the cost of farm labor AND provides TWO examples of ways that agricultural mechanization contributed to the growth of factories and cities.

Essential

Response accurately describes the impact of farm machinery on the cost of farm labor AND provides ONE example of ways that agricultural mechanization contributed to the growth of factories and cities

OR

the response provides TWO examples of ways that agricultural mechanization contributed to the growth of factories and cities.

Partial

Response accurately describes the impact of farm machinery on the cost of farm labor

OR

the response provides ONE example of ways that agricultural mechanization contributed to the growth of factories and cities.

Inappropriate

Response does not accurately answer the first question or provide any examples.

Part 1: Response provides a correct interpretation of the data with respect to machine versus hand labor costs.

Credited responses could include:

1. Machines made farming more efficient.
2. It was cheaper to produce crops by machine than by hand.

Part 2: Impact of agricultural mechanization on growth of factories and cities.

Credited responses could include:

1. The increased mechanization of farming meant that fewer farmers or farm laborers were needed to grow food for the cities/rural workers migrated to the cities to work in factories/factory wages attracted workers from rural areas.
2. Farms produced more food to support larger city populations/cities could grow larger because there would be enough food to feed the residents.

Complete - Student Response

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

The machines could harvest more
crops in less time for less money.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

The growth of machines on farms led to more people working in factories, because they could no longer work in farms, and more people in cities because the farms could now supply more people.

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

Machines were, as shown, much cheaper, and required much less use, than hand workers, so the demand for farm workers went down.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

Because the farm machines were being used much more for their efficiency, farm workers were no longer needed, so they moved to the cities for work. The only labor they were trained for was hard labor, so they worked in the factories.

Scorer Comments:

These two sample responses were scored Complete. They correctly describe the impact of farm technology on the cost of farm labor and give two acceptable examples of how farm machinery, in turn, affected the growth of cities and factories. Both responses explain that as farmers were replaced by farm machinery they sought work in factories. The top response explains that cities also grew because farm machinery allowed farms to feed more people.

Essential - Student Response

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

Took less time and was lower in labor cost.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

· With farm machines nobody needed to work in the farm.
· People who worked on a farm lost their job so they went and worked in a factory.

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

That machines were better than humans as for as efficiency goes.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

Because more wheat could be produced cities could be larger.

Scorer Comments:

These two responses were scored Essential--they correctly explain that machines were more efficient than human labor and give one example of the impact of mechanization. The first response explains that farm workers left farms to take factory jobs. The second response explains that more productive farms could better supply food for growing cities.

Partial - Student Response

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

Using machines was cheaper if you didn't own a lot of them.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

Farm machinery worked faster than people did by hand. Therefore causing factories and cities to get money faster. More people were starting to lose their jobs because of the need for machines to do their work.

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

Corn produces more for money.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

The farm machines produced more crops that could be stored, so the factories may have been started because of canning perishables.

Scorer Comments:

These two responses were scored Partial, meaning they received credit for either answering the question about the impact of machines on the cost of farm labor or giving one example for the second part of the question. Here, the first paper was credited for the labor cost task (the accepted answer comes by combining the top response area and the first sentence in the bottom response area). The examples were not credited because they do not connect the decline in farm labor to any specific change in factories or cities. The second sample response received credit for the example that more food production led to growth in the canning industry. The answer to the first question, "corn produces more for money" is too vague to receive credit.

Inappropriate - Student Response

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

That when they got machine it slowed every thing down. They were even losing a lot of money. When the hand picked everything, they were get more money.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

Two examples are that now they don't have to provide all the transportation to get the crops and now they don't have to do a lot of things.

What does the table above show about the impact of the use of machines on the cost of farm labor in the late 1800's?

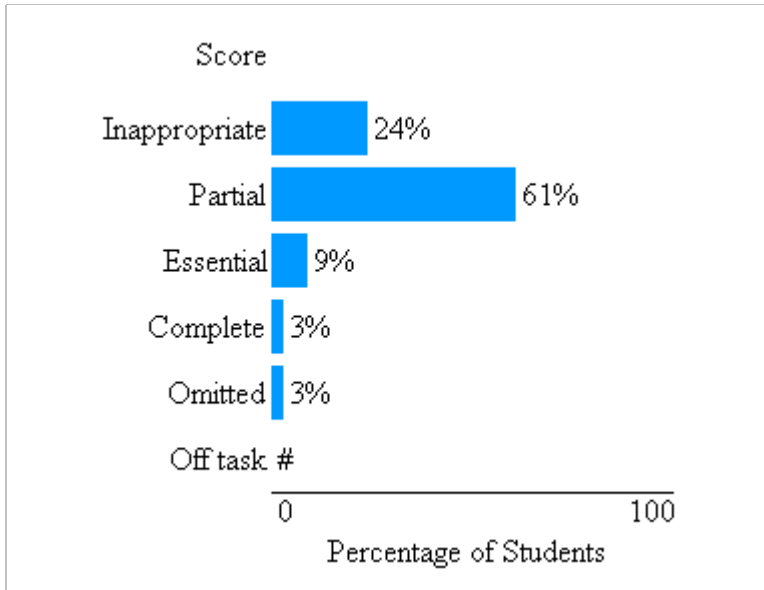
In the 1800's, the machines cost nothing compared to today. Back then, \$2.00 was a lot of money. Today, you can barely get a candy bar for \$.66.

Give two examples of how the use of farm machines contributed to the growth of factories and cities in the United States in the late 1800's.

The money was a lot in the 1800's, so it helped the factories produce machines to do things on its own, and it helped the factories afford more things

Scorer Comments:

These two responses were scored Inappropriate. Neither provides a clear answer to either part of the question.



Rounds to zero.

NOTE: These results are for public and nonpublic school students. Percentages may not add to 100 due to rounding. Off task applies to responses that do not address the question presented, are illegible, or cannot otherwise be scored.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2010 U.S. History Assessment.