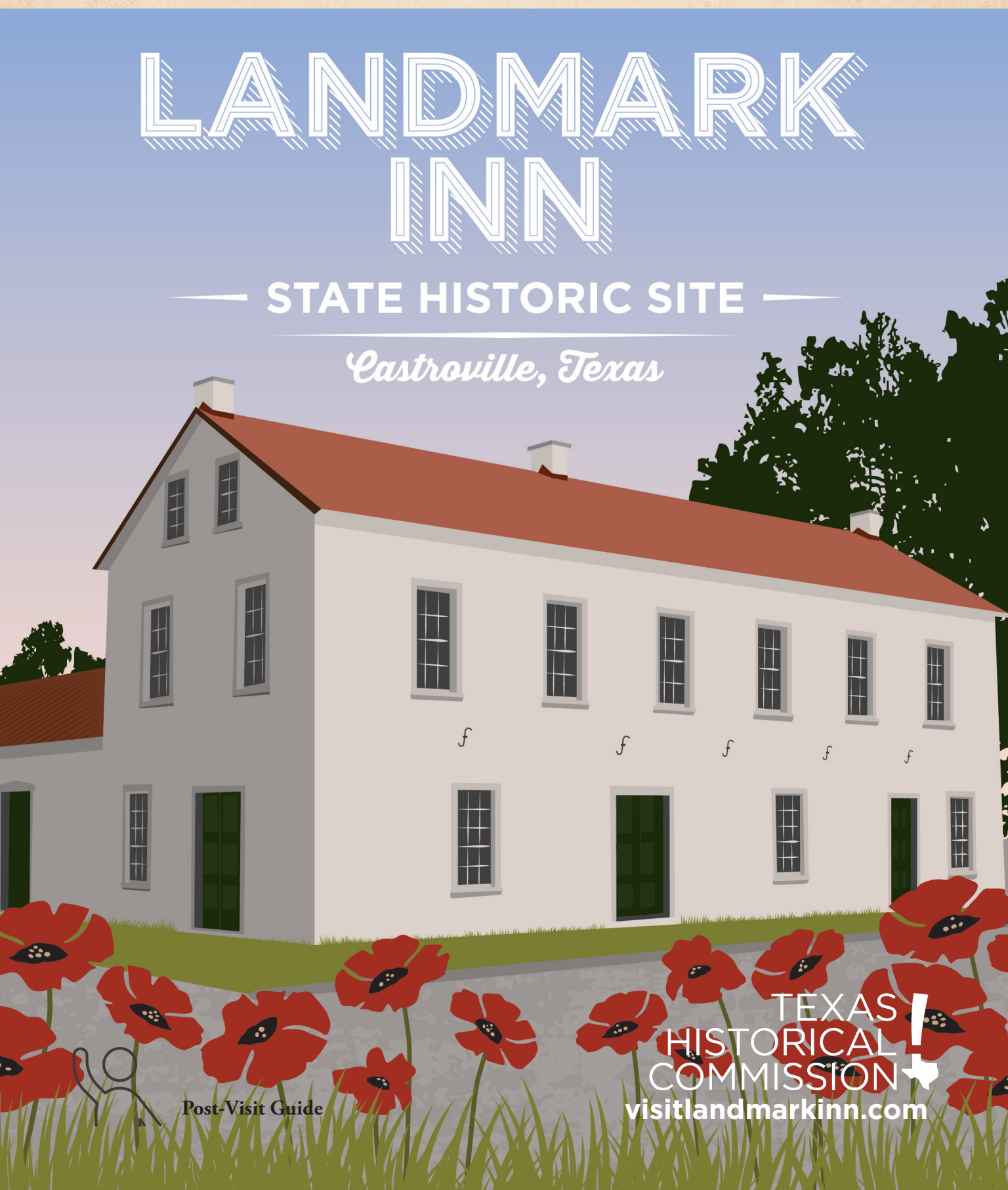
Texas Historical Commission

Post-Visit Guide
Grade 7



Overview: Milling on the Medina

When Henri Castro founded Castroville in 1844, the fledgling settlement was on the edge of the western frontier. The lives of Native Americans, settlers, enslaved people, traders, soldiers, and adventurers intersected at Landmark Inn, built at the entrance to town on the Chihuahua-San Antonio Road. In this lesson, students explore the agricultural and industrial might of the mill, how it changed over time under different owners, and its contributions to the greater community.

Social Studies TEKS

(9) Geography. The student understands the effects of the interaction between humans and the environment in Texas. The student is expected to:

(A) identify ways in which Texans have adapted to and modified the environment and explain the positive and negative consequences of the modifications.

(19) Science, technology, and society. The student understands the impact of scientific discoveries and technological innovations on the political, economic, and social development of Texas. The student is expected to:

(A) compare types and uses of technology, past and present;

(C) analyze the effects of various scientific discoveries and technological innovations on the development of Texas such as advancements in the agricultural, energy, medical, computer, and aerospace industries;

(D) evaluate the effects of scientific discoveries and technological innovations on the use of resources such as fossil fuels, water, and land.

(20) Social studies skills. The student applies critical-thinking skills to organize and use information acquired through established research methodologies from a variety of valid sources, including technology. The student is expected to:

(A) differentiate between, locate, and use valid primary and secondary sources such as media and news services, biographies, interviews, and artifacts to acquire information about Texas;

(B) analyze information by applying absolute and relative chronology through sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions;

(C) organize and interpret information from outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps;

(E) support a point of view on a social studies issue or event.

Materials

- ★ Historical images for display distribution
- ★ Making the Mill investigation activity resources

Vocabulary

commercial: relating to the buying and selling of goods and services

Activity: Landmark Inn Visit

5 minutes

Ask students to reflect on their visit to the Landmark Inn by completing all columns of their **KWL chart**. Have students share their experiences including any new questions raised by the visit.

Investigation Activity: Making the Mill

40 minutes

Context: In 1854, John Vance sold the undeveloped, lower portions of his two lots to George Louis Haass and Laurent Quintle for $4,000. Quintle was an original Castro colonist from France. That year, Haass and Quintle built a stone and wood dam across the Medina River to divert water through an underground mill race into a two-story stone gristmill. Soon after, they also constructed a cotton gin.

The Quintle and Haass mill ownership operated primarily on custom mill work for farmers. The mill took a portion of the cornmeal as payment for the grinding, but the cornmeal itself was returned to the farmer for his use. By 1860, the mill was producing an annual product of 12,000 bushels into cornmeal, valued at $9,000. The cotton gin produced an annual product of 50 bales of cotton worth $2,500. By 1880, under the Courand family's ownership, most of the mill work was commercial and the products for market sale. As a custom mill, production was 12,000 bushels of cornmeal in 1860. The Courand commercial mill reportedly produced 1,000,000 pounds of cornmeal and 900 barrels of wheat flour in 1880. With each change in ownership, equipment and mill technology was upgraded so that output continued to grow. Steam engines and boilers were added to ensure that production continued even when water levels were too low. The mill operated continuously until 1925 when the property was sold to the Lawler family.

Introduce the activity by watching these videos from Landmark Inn about the inn and the Medina River and gristmill technology. Distribute or display the **activity image resources** of an 1854 German language ad for the cotton gin and the mill in 1903.

Ask: How would the opening of this gristmill in Castroville have changed the community?

Distribute or display the **Making the Mill timeline, crops data chart**, and **investigation worksheet**. Preview each resource. Explain that the crops data chart presents general historical information, but would be applicable to the Castroville gristmill. Students may work individually or in small groups. Share responses when completed.

Answer Key

Mill Timeline

1. S.S. Brown
2. 1879
3. Haas and Quintle
4. A roller
5. J.T. Lawler
6. Hydroelectric plant

Crop Data Chart

1. 39 cents
2. $1.036
3. 24,157 (62,545 acres - 38,388 acres)

Mill Math Text

1. 32.88 bushels (12,000 bushels/365 days)
2. 1,278 lbs (32.88 bushels * 48 lbs)
3. $24.66 ($9,000/365 days)
4. 576,000 (12,000 bushels * 48 lbs)
5. $390,000 (1,000,000 lbs cornmeal * 39 cents)
6. 81% (1,000,000—552,000)/552,000 x 100)

Assessment

Evaluate student engagement and instructional activities for completeness and understanding.

ELAR Activity: Chassard v. Haass and Quintle

(11) Composition: listening, speaking, reading, writing, and thinking using multiple texts--genres. The student uses genre characteristics and craft to compose multiple texts that are meaningful. The student is expected to:

(D) compose correspondence that reflects an opinion, registers a complaint, or requests information in a business or friendly structure.

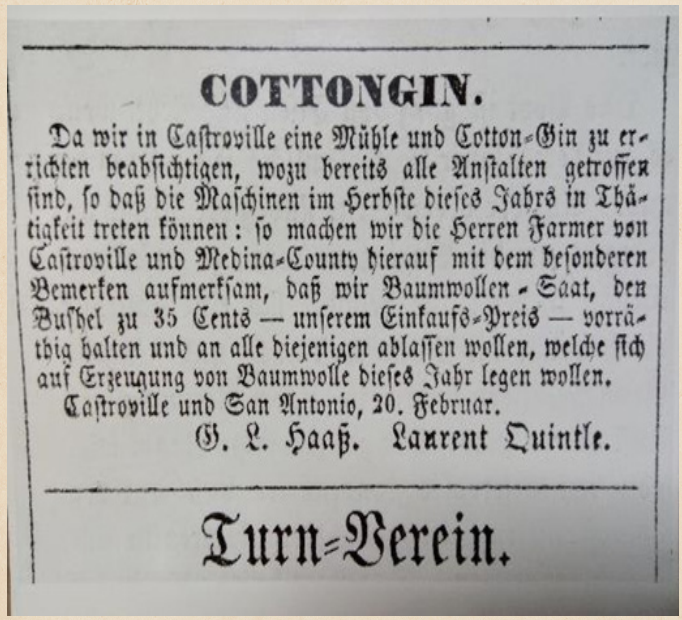
(19) Writing/Persuasive Texts. Students write persuasive texts to influence the attitudes or actions of a specific audience on specific issues. Students are expected to write persuasive essays for appropriate audiences that establish a position and use supporting details.

Context: Haass and Quintle were not the first or the only mill operators on the Medina River. Peter Chassard built a mill in 1852, upstream from the Haass-Quintle location. When the partners finished their dam across the Medina River in 1854, the river flooded Chassard's mill and race, putting him out of business. Chassard sued Haass and Quintle and was rewarded $620 in damages.

Have students recreate the Chassard v. Haass and Quintle suit filed in 1554 in Medina County either orally or in writing. Divide students into two sides, with one side arguing for Chassard to receive damages and one side arguing for Haass & Quintle to be acquitted.

Resource Images: Making the Mill

In 1854, Haass and Quintle ran this notice in the San Antonio Zeitung, a German-language newspaper.



COTTONGIN.

Da wir in Castroville eine Mühle und Cotton-Gin zu errichten beabsichtigen, wozu bereits alle Anstalten getroffen sind, so daß die Maschinen im Herbste dieses Jahrs in Thätigkeit treten können: so machen wir die Herren Farmer von Castroville und Medina-County hierauf mit dem besonderen Bemerken aufmerksam, daß wir Baumwollen-Saat, den Bushel zu 35 Cents — unserem Einkaufs-Preis — vorräthig halten und an alle diejenigen ablassen wollen, welche sich auf Erzeugung von Baumwolle dieses Jahr legen wollen.

Castroville und San Antonio, 20. Februar.

G. L. Haaß. Laurent Quintle.

Turn-Verein.

Translation: "Whereas we intend to erect a Mill and Cotton-Gin in Castroville, the preparations for which are already under way with completion of the machinery projected for this fall; we are making the farmers of Castroville and Medina County particularly aware of our offer to sell cottonseed at 35 cents a bushel – our own wholesale purchase price – to all those who would like to raise a cotton crop this year."

The mill in 1903, under Joseph Courand, Jr. ownership.

Activity Resource: Making the Mill Timeline

1854 - Age of Custom Milling

- Haass and Quintle purchased the riverside portions of the property from Vance for $4,000. They built the Medina River Dam, a 2-story gristmill, and a gin. The mill was designed by David Monroe of Seguin, who was considered the state's premier mill architect. The cost to build the dam, head race, and mill was $8,000. In today's money, the $12,000 total spent by Haass and Quintle would be about a half million dollars.

1869

- S.S. Brown acquired the mill in its entirety and added a 20 horsepower steam engine.

1876

- Joseph Courand, Sr., an early Castroville settler, purchased the mill, dam, and mill race from S.S. Brown. In 1879, the *San Antonio Daily Herald* mentioned the expanded operation of Courand's steam-and water-powered flour, grist, and lumber mill. This was the first mention of flour milling

1879 - Age of Commercial Milling

- Joseph Courand, Jr. and family inherited the mill. In 1880, Courand, Jr. built a new gin on the property. The gin house was built of sheet iron, two-story, and equipped with Brown 60-saw gin and Coleman steam press. In 1890, Courand replaced a set of millstones with a roller mill, which crushed the grain allowing for faster milling. Courand installed a new boiler for the mill in 1897. Prior to 1900, a large wagon scale was installed for weighing wagons of cotton and grain.

1925

- In 1925, the Lawler family purchased the mill and surrounding property. J.T. Lawler held to progressive ideals. He demolished the gin and converted the mill into a hydroelectric power plant, which provided areas of Castroville with electricity, a first for the city

Activity Resource: Crops Data, 1839-1957

Historical statistics of the United States, Colonial Times to 1957 https://www2.census.gov/library/publications/1960/compendia/hist_stats_colonial-1957/hist_stats_colonial-1957-chK.pdf

Series K 265–273. Corn and Wheat Acreage, Production, Price, and Stocks: 1839 to 1957—Con.

[Census figures in italics]

Year	Corn for all purposes			All wheat for grain		
	Acreage harvested	Production	Price per bushel [1]	Acreage harvested	Production	Price per bushel [1]
	265	266	267	269	270	271
	1,000 acres	*1,000 bushels*	*Dollars*	*1,000 acres*	*1,000 bushels*	*Dollars*
1925	101,331	2,798,367	0.701	52,443	668,700	1.437
1924	*98,402*	*[2] 1,323,880*	.....	*50,862*	*800,877*	.....
1924	100,420	2,223,123	1.063	52,463	841,617	1.247
1923	101,123	2,875,292	.814	56,920	759,482	.926
1922	100,345	2,707,306	.732	61,397	846,649	.966
1921	103,155	2,928,442	.518	64,566	818,964	1.030
1920	101,359	3,070,604	.638	62,358	843,277	1.827
1919	*[2] 87,772*	*[2] 2,345,833*	.....	*73,099*	*945,403*	.....
1919	98,145	2,678,541	1.513	73,700	952,097	2.163
1918	102,195	2,441,249	1.520	61,068	904,130	2.050
1917	110,893	2,908,242	1.456	46,787	619,790	2.047
1916	100,561	2,425,206	1.137	58,510	634,572	1.434
1915	100,623	2,829,044	.676	60,303	1,008,637	.961
1914	97,796	2,523,750	.708	55,613	897,487	.975
1913	100,206	2,272,540	.703	52,012	751,101	.794
1912	101,451	2,947,842	.552	48,413	730,011	.807
1911	101,393	2,474,635	.678	49,894	618,166	.869
1910	102,267	2,852,794	.515	45,793	625,476	.908
1909	*[2] 98,383*	*[2] 2,552,190*	.....	*44,263*	*683,379*	.....
1909	100,200	2,611,157	.616	44,262	683,927	.991
1908	95,285	2,566,742	.650	45,102	642,818	.967
1907	96,094	2,613,797	.505	44,139	628,764	.866
1906	95,624	3,032,910	.391	46,230	740,509	.660
1905	95,746	2,954,148	.406	46,306	706,026	.747
1904	95,228	2,686,624	.436	43,155	555,571	.926
1903	93,555	2,515,093	.419	48,456	663,115	.693
1902	97,177	2,773,954	.401	46,244	686,959	.630
1901	94,422	1,715,752	.600	50,847	762,546	.631
1900	94,852	2,661,978	.350	49,203	599,315	.621
1899	*[2] 94,914*	*[2] 2,666,324*	.....	*52,589*	*658,534*	.....
1899	94,591	2,645,796	.298	52,342	655,143	.588
1898	87,784	2,351,323	.285	50,506	768,148	.579
1897	89,965	2,287,628	.260	43,413	606,202	.809
1896	89,074	2,671,048	.214	40,828	522,963	.721
1895	90,479	2,534,762	0.252	38,998	542,119	0.505
1894	80,069	1,615,016	.451	40,167	541,873	.489
1893	79,832	1,900,401	.361	40,790	505,795	.534
1892	76,914	1,897,412	.393	42,979	611,854	.624
1891	78,855	2,335,804	.398	41,090	677,543	.831
1890	74,785	1,650,446	.496	36,686	449,042	.837
1889	*[2] 72,088*	*[2] 2,122,328*	.....	*33,580*	*468,374*	.....
1889	77,656	2,294,289	.275	36,098	504,370	.698
1888	77,474	2,250,632	.331	34,969	423,867	.927
1887	73,296	1,604,549	.424	36,873	490,761	.681
1886	73,911	1,782,767	.357	36,312	513,540	.687
1885	71,854	2,057,807	.322	35,095	399,931	.772
1884	68,834	1,947,838	.349	38,485	571,292	.645
1883	68,168	1,652,148	.418	35,587	438,762	.914
1882	66,157	1,755,272	.481	36,496	552,207	.888
1881	63,026	1,244,893	.628	36,795	405,886	1.196
1880	62,545	1,706,673	.390	38,096	502,257	.952
1879	*[2] 62,369*	*[2] 1,754,592*	.....	*35,430*	*459,483*	.....
1879	62,229	1,751,984	.364	35,347	459,234	1.107
1878	59,659	1,564,537	.313	33,379	449,175	.772
1877	58,799	1,515,862	.357	27,963	395,510	1.085
1876	55,277	1,478,173	.361	28,283	309,116	1.036
1875	52,446	1,450,276	.419	28,382	313,728	1.010
1874	47,640	1,058,778	.641	27,310	356,115	.948
1873	44,084	1,008,326	.483	24,866	321,931	1.168
1872	43,584	1,279,369	.383	22,962	271,482	1.239
1871	42,002	1,141,715	.464	22,230	271,881	1.247
1870	38,388	1,124,775	.521	20,945	254,429	1.042
1869	.....	*[2] 760,945*	.....	.....	*237,746*	.....
1869	35,833	782,084	.725	21,194	289,526	.923
1868	35,116	919,590	.617	19,140	246,272	1.459
1867	32,116	793,905	.781	16,738	210,878	2.012
1866	30,017	730,814	.657	15,408	169,703	2.062
1859	.....	*[2] 838,793*	.....	.....	*173,105*	.....
1849	.....	*[2] 592,071*	.....	.....	*100,486*	.....
1839	.....	*[2] 377,532*	.....	.....	*84,823*	.....

[1] Season average price received by farmers, 1908–1957; Dec. 1 price prior to 1908.

[2] Corn harvested for grain only.

Primary Source Investigation: Making the Mill

Use information from the Mill Timeline, Crop Data chart, and Mill Math text below to answer the questions.

Mill Timeline

1. Who owned the mill after Haass and Quintle?

2. When did the mill begin processing wheat for flour?

3. Who built the Medina River dam?

4. In 1890, what new equipment did Joseph Courand, Jr. install that made milling faster?

5. Who purchased the mill in 1925?

6. Lawler converter the mill building into what?

Crop Data Chart

1. What were corn bushels worth per pound in 1880?

2. What were flour bushels (all wheat) worth per bushel in 1876?

3. How many more acres of corn were harvested from 1870 to 1880?

Primary Source Investigation: Making the Mill pg.2

In 1860, the annual yield of the Haass and Quintle custom mill was 12,000 bushels of corn ground into cornmeal, valued at $9,000. (One bushel of cornmeal is estimated to weigh 48 pounds). The cotton gin produced an annual yield of 50 bales of cotton worth $2,500. By 1880, the commercial Courand mill reportedly produced 1,000,000 pounds of cornmeal and 900 barrels of wheat flour per year.

1. What was the approximate **daily bushel** production of cornmeal by Haass and Quintle in 1860?

2. How many **pounds** is that?

3. How much **money** did Hass and Quintle earn per day producing cornmeal?

4. How many **total pounds** of cornmeal did the mill produce in 1860?

5. How much **money** did Courand make from milling corn into cornmeal in 1880?

6. Calculate the **growth rate percentage** in the number of pounds of cornmeal produced at the Castroville mill between 1860 and 1880 using the following formula:

$$\text{Growth Percent Rate} = \frac{(\text{80s Value} - \text{60s Value})}{\text{60s Value}} \times 100$$