Why did the Romans build roads? The Romans considered a well-organized and efficient transportation system a basic element of proper administration; i.e. an indispensable element in creating and maintaining the Roman state. The earliest highways or main roads were constructed for the use of the military, and their economic benefit for civilians was a later byproduct and not the main reason for their creation. The military nature of the roads continued to be essential as Romans expanded into territory outside Italy. In the province of Arabia Petraea (which included what is now Jordan), the movement of troops and ease of communication for the army and Roman administration were the primary reasons for construction of the Via Nova, one of the many viae militares or military roads built in conquered provinces. However, smaller, shorter, and less well-constructed local roads (actus) or tracks (callis) also increased in territory after it was brought under Roman control. Nevertheless, the main public highways (viae publicae) normally began as military roads and only gradually evolved into civilian conduits [passageways].

Based on this excerpt from the Virtual Karak Resources Project, what was one way the Romans used roads to control their empire?

Score of 1:
- States a way the Romans used roads to control their empire based on this excerpt from the Virtual Karak Resources Project
  
  Examples: to maintain proper administration of the Roman state; to move troops; to maintain the security of the Roman Empire; to connect territories outside of Italy to Rome; to ease communication/for ease of communication for the army/Roman administration; to integrate new areas into the Roman Empire

Score of 0:
- Incorrect response
  
  Examples: there was a need for smaller/shorter/less well-constructed local roads; for civilian use; there were different kinds of roads

- Vague response
  
  Examples: they were passageways; the roads continued to be essential; movement and ease; transportation; economic benefits

- No response
Source: Brian M. Fagan, Kingdoms of Gold, Kingdoms of Jade: The Americas Before Columbus, Thames and Hudson

2 According to Brian M. Fagan, what were two ways the Incas used roads to unify their empire?

Score of 2 or 1:
• Award 1 credit (up to a maximum of 2 credits) for each different way the Incas used roads to unify their empire according to Brian Fagan

Examples: as a communication system/to carry correspondence; to carry important officials or entire armies or all manner of commodities/trade goods; to connect farmers in widely separated valleys/connect different areas to one another; to extend the network of earlier states; to link the individual and the remote central government; to link sacred shrines to the Temple of the Sun in Cuzco; to link separate groups of people

Note: To receive maximum credit, two different ways the Incas used roads to unify their empire must be stated. For example, as a communications system includes the subset to carry correspondence and is the same way expressed in different words. In this and similar cases, award only one credit for this question.

Score of 0:
• Incorrect response

Examples: they built the roads over some of the most rugged terrain on Earth; to be the flag of the Inca state; to separate farmers from the central government

• Vague response

Examples: to connect; to make it easier for civilians; to extend the network

• No response
The Tokugawa shogunate realized the importance of maintaining contact with distant provinces within Japan. The Tōkaidō was its most important highway.

...Perhaps the most crucial use of the road was for governmental communication with the provinces. Official messengers traveled by foot, horseback (in wartime), and palanquin. The government used a system of relays for messengers, with reliefs at every seven li [3.9 km]. Government messengers had priority over any other type of traveler. They had first access to ferries at river crossings along the way, and could freely pass government road barriers at all times of the day or night. Private citizens were not allowed to travel at night; a series of barriers and checkpoints along the road kept them from doing so….

Source: Patricia J. Graham, “The Political and Economic Importance of the Tōkaidō,” Tōkaidō: Adventures on the Road in Old Japan, University of Kansas Spencer Museum of Art (adapted)

Document 3b

Relay Station: Hōeidō #53

...Here, a man is riding in a “fast palanquin,” gripping a strap for fear of falling off. The bearers of these palanquins would change at the relay stations, but the rider transmitting the message would endure the grueling ride until he reached his destination and could transmit his secret message in person.

Source: Patricia J. Graham, “The Political and Economic Importance of the Tōkaidō,” Tōkaidō: Adventures on the Road in Old Japan, University of Kansas Spencer Museum of Art (adapted)
3 According to Patricia J. Graham, what were two ways the Tokugawa controlled the use of the Tōkaidō Road?

Score of 2 or 1:
• Award 1 credit (up to a maximum of 2 credits) for each different way the Tokugawa controlled the use of the Tōkaidō Road according to Patricia J. Graham

  Examples: they set up a series of barriers/checkpoints; they did not allow private citizens to travel at night/citizens had restrictions on when they could travel/barriers and checkpoints were used to prevent private citizens from traveling at night; government messengers were permitted to freely pass government road barriers at all times of the day or night/were given priority over any other type of traveler/were given first access to ferries

Note: To receive maximum credit, two different ways the Tokugawa controlled the use of the Tōkaidō Road must be stated. For example, private citizens were not allowed to travel at night and citizens had restrictions on when they could travel are the same way expressed in different words. In this and similar cases, award only one credit for this question.

Score of 0:
• Incorrect response

  Examples: official messengers traveled by foot/horseback/palanquin; there were relay stations; citizens could go anywhere, anytime; people could freely pass; palanquin riders transmitted secret messages; riders stayed in the palanquin until they reached their destination

• Vague response

  Examples: roads were used by the government; there was travel at night; the road was crucial

• No response
Document 4

The Grand Canal of China

...The Grand Canal got more attention than other waterways because it was the main route to the capital city. Officials used it to travel to the court. Above all, its purpose was to carry grain from the south to the north. Taxes were paid in rice that was used to feed the court and pay the wages of workers and the army.

At times when the canal was neglected, the grain had to be taken north by sea. But sailing ships were exposed to storms and pirates. Even when steamships plied the coast, the grain continued to be carried on the Grand Canal until 1901, for this provided jobs for many people.

4 According to Lyn Harrington, what are two reasons the Grand Canal was important to the Chinese?

Score of 2 or 1:

- Award 1 credit (up to a maximum of 2 credits) for each different reason the Grand Canal was important to the Chinese according to Lyn Harrington
  
  Examples: it was a main route to the capital city; officials used it to travel to the court; it carried grain from the south to the north; it was used to transport grain/rice/goods; it provided jobs for many people; the canal helped those transporting goods avoid pirates or storms on the open seas; it was safer for transporting goods than the open seas; to transport rice paid as taxes to feed the court

Note: To receive maximum credit, two different reasons the Grand Canal was important to the Chinese must be stated. For example, it was used to transport goods and its purpose was to carry grain from the south to the north are the same reason expressed in different words. In this and similar cases, award only one credit for this question.

Score of 0:

- Incorrect response
  
  Examples: taxes paid in rice; steamships plied the coast; it got more attention than other waterways; to prevent floods; it was neglected

- Vague response
  
  Examples: it was a route; it was useful

- No response
Tenochtitlán: Capital City of the Aztecs

- Tenochtitlán was crisscrossed by canals.
- Canals served as the major streets of the city.
- Merchant canoes carried goods to the city’s major market, Tlatelolco.
- Tribute in the form of gold, silver, beautiful feathers, cocoa, bark paper, as well as victims for human sacrifice were brought into Tenochtitlán on the canals.

5 Based on this document, state one way the canals were vital to the functioning of the Aztec capital of Tenochtitlán.

Score of 1:
- States a way the canals were vital to the functioning of the Aztec capital of Tenochtitlán based on this document
  
  Examples: canals served as the major streets of the city; merchants were able to transport goods to the city’s major market/Tlatelolco; tribute was brought into Tenochtitlán on the canals; gold/silver/beautiful feathers/cocoa/bark paper/victims for human sacrifice were brought into Tenochtitlán on the canals; crisscrossing canals connected the various areas of the city

Score of 0:
- Incorrect response
  
  Examples: the city’s major market was Tlatelolco; Aztecs made human sacrifices; Tenochtitlán was crisscrossed
- Vague response
  
  Examples: it was useful; Aztecs demanded tribute; Tenochtitlán was the capital
- No response
Steamship Routes, about 1914


Shipping Distances between London and the East

<table>
<thead>
<tr>
<th>Route</th>
<th>Via the Cape</th>
<th>Via the Canal</th>
</tr>
</thead>
<tbody>
<tr>
<td>London-Bombay</td>
<td>19,755 km</td>
<td>11,619 km</td>
</tr>
<tr>
<td>London-Calcutta</td>
<td>22,039</td>
<td>14,970</td>
</tr>
<tr>
<td>London-Singapore</td>
<td>21,742</td>
<td>15,486</td>
</tr>
<tr>
<td>London-Hong Kong</td>
<td>24,409</td>
<td>18,148</td>
</tr>
<tr>
<td>London-Sydney</td>
<td>23,502</td>
<td>22,493</td>
</tr>
</tbody>
</table>

Source: Daniel R. Headrick, *The Tentacles of Progress: Technology Transfer in the Age of Imperialism, 1850–1940*, Oxford University Press (adapted)
6 Based on these documents, state one way the Suez Canal improved Great Britain’s shipment of goods and troops to its empire in the East.

Score of 1:
• States a way the Suez Canal improved Great Britain’s shipment of goods and troops to its empire in the East based on these documents
  
  *Examples:* the Suez Canal shortened the trip/shipping distance between London and Bombay/Calcutta/ Singapore/Hong Kong/Sydney/the East; a steamship did not have to round Africa/Cape of Good Hope to get to parts of the empire in Asia/the East; it decreased the distance/time needed to travel to parts of the empire in Asia/the East; the shipping distance from London to Bombay dropped from 19,755 km via the Cape to 11,619 km via the canal; it provided a more direct route from London to Bombay

Score of 0:
• Incorrect response
  *Examples:* it increased the trip/distance between London and Bombay; steamship routes were lengthened; only Great Britain used the Suez Canal

• Vague response
  *Examples:* it provided steamship routes; there were shipping distances; they used technology; it was easier; it was shorter/it shortened it

• No response
Document 7

General Moltke believed railroads would contribute to Otto von Bismarck’s Prussian military efforts in the 1860s.

...The railroads offered new strategic opportunities. Troops could be transported six times as fast as the armies of Napoleon [1808–1812] had marched, and the fundamentals of all strategy, time and space, appeared in a new light. A country which had a highly developed system of rail communications gained important and possibly decisive advantages in warfare. The speed of the mobilization and of the concentration of armies became an essential factor in strategic calculations. In fact, the timetable of mobilization and assemblage, together with the first marching orders, henceforth formed the very core of the strategic plans drawn up by the military staffs in expectation of war. 

Source: Hajo Holborn, “Moltke’s Strategical Concepts,” Military Affairs (adapted)

7 According to Hajo Holborn, why did General Moltke consider railroads to be strategically important to Bismarck’s Prussian military efforts?

Score of 1:
- States a reason General Moltke considered railroads to be strategically important to Bismarck’s Prussian military efforts according to Hajo Holborn
  
  Examples: troops could be transported quickly/troops could be transported six times as fast as the armies of Napoleon had marched/it lessened the time needed to transport troops; rail communications could give important/decisive advantages in warfare; it provided the ability to mobilize faster/to concentrate armies

Score of 0:
- Incorrect response
  
  Examples: Napoleon could not march far; mobilization was slow; it took longer to transport troops
- Vague response
  
  Examples: they were essential; they offered opportunities/new opportunities; it became fundamental
- No response
Document 8

An enduring monument to British imperialism in India is the Indian railway system, which at the time of independence in 1947 had more track mileage than that of any European state and less than only the United States, Canada, and the Soviet Union. The first railway track was laid in India in 1850, and by 1915 India had better than forty thousand miles of track and approximately one hundred million railroad passengers per year. Indian railway building was supported by several powerful groups: British cotton manufacturers, for whom railways were a cheap and efficient way to get cotton to the coast for shipment to England; British industrialists, who supplied India with most of its rails, locomotives, moving stock [railroad cars], and equipment; colonial officials, who saw railroads as a way to move troops quickly to trouble spots and an essential part of the Indian postal system; and millions of Indians, who, rather to the surprise of the British, took to rail travel with great alacrity [enthusiasm]....

Source: Andrea and Overfield, The Human Record: Sources of Global History, Houghton Mifflin

8 According to Andrea and Overfield, what were two ways the British used railroads in India?

Score of 2 or 1:

• Award 1 credit (up to a maximum of 2 credits) for each different way the British used railroads in India according to Andrea and Overfield

Examples: cotton manufacturers used railways to get cotton to the coast for transport/shipment to England; allowed British industrialists to make a profit by supplying materials for railroad construction/to make money by supplying India with rails/locomotives/moving stock/railroad cars/equipment; building railroads in India was profitable for British industrialists who supplied the rails/locomotives/moving stock/equipment; colonial officials transported/moved troops quickly by rail to trouble spots; to move mail within the Indian postal system; colonial officials used railroads to control the colony; to spread/extend British imperialism/to serve British imperialist goals

Note: To receive maximum credit, two different ways the British used railroads in India must be stated. For example, it helped move troops quickly to trouble spots and military could get to problem areas quickly are the same way expressed in different words. In this and similar cases, award only one credit for this question.

Score of 0:

• Incorrect response

Examples: millions of Indians rode the rails with great enthusiasm; approximately 100 million railroad passengers used it between 1850 and 1915; India had better than forty thousand miles of track; British industrialists sent rails/locomotives/moving stock/railroad cars/equipment to India

• Vague response

Examples: it was an enduring monument; they were the first railway tracks; it was supported by several powerful groups

• No response
...In tropical Africa the French were for a time the most enthusiastic railroad builders. In 1879, soon after beginning their penetration of the Western Sudan, they laid plans for a railroad from Senegal inland. Their first line was inaugurated in 1885 between Saint-Louis and Dakar, a distance of 163 miles. Another line, from Kayes on the Senegal River to Koulikoro on the upper Niger, was begun in 1881 and completed in 1906; this was primarily a military line whose purpose was to transport troops through unconquered territory. Yet another line, linking Konakry in French Guinea to the upper Niger, was built between 1899 and 1914, mostly for the export of natural rubber. After that the French did relatively little railroad building....

Source: Daniel R. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century*, Oxford University Press (adapted)

9 According to Daniel R. Headrick, what was one reason the French built railroads in tropical Africa?

Score of 1:
- States a reason the French built railroads in tropical Africa according to Daniel R. Headrick
  
  *Examples:* to transport troops through unconquered territory/to transport the military; to export natural rubber; to link Saint-Louis and Dakar; to link Kayes on the Senegal River to Koulikoro on the upper Niger; to link Konakry in French Guinea to the upper Niger; to extend their penetration of Western Sudan; to extend control inland from Senegal; to connect places in French territory; to extend French imperialism

Score of 0:
- Incorrect response
  
  *Examples:* to import natural rubber to tropical Africa; to preserve unconquered territory
- Vague response
  
  *Examples:* they were enthusiastic railroad builders; it was technology; plans were made; to link things
- No response