

Construction Workers

You will need to calculate the cost for each route 3 ways:

- 1. Using only slave labor**
- 2. Using no slave labor**
- 3. Using a mixture of slaves and freedmen for labor**

Labor rates: You will need to complete this project within 30 days.

Each group of 1000 workers can build 1 mile of road per day.

Freedmen-25 cents per day

Slaves-10 cents per day.

Architect-\$500 to plan each bridge

Extra cost- \$250 per mile to build while traveling over a mountain.

Foremen-\$1.00 per day (you need 1 foreman for every 50 freedmen or every 25 slaves).

Step 1- For each route you will need to figure out how many workers you will need to build the road within the 30 day time period.

Step 2-For each route you will need to figure out how much it will cost to pay for freedmen laborers.

Step 3-For each route you will need to calculate how much it will cost to pay for slave laborers.

Step 4-For each route you will need to calculate how much it will cost to pay for a mix of slave and freedmen laborers.

Step 5-For every 25 slaves and every 50 freedmen, you will need to add the cost of a foreman to each route.

Step 6-For every bridge you will need to add \$500 to your cost.

Step 7-For every mile of mountain you will need to add \$250 to your cost.

Step 8-Add up all of the individual costs for each route for a route total.

Route A: This route is 150 miles long and will need 2 bridges.

Step1:

Step2:

Step3:

Step4:

Step5:

Step 6:

Step 7:

Step 8:

Route B: This route is 100 miles long; will need 3 bridges, 20 miles of mountains, and 30 miles of desert.

Step1:

Step2:

Step3:

Step4:

Step5:

Step 6:

Step 7:

Step 8:

Route C: This route is 125 miles long; will need 10 miles of mountains, and 5 bridges.

Step1:

Step2:

Step3:

Step4:

Step5:

Step 6:

Step 7:

Step 8:

Route D: This route is 175 miles long and will need 1 bridge.

Step1:

Step2:

Step3:

Step4:

Step5:

Step 6:

Step 7:

Step 8: