## Lab Framework

Text: Ammes Unit 3, Unit 4, Unit 12 Unit 13 Short Description: Put together a competitive proposal from print

## Lab Title You can dig-it

Lab Objective

Your customer claims he can dig his pool cheaper than you can. You can use the work since this is how you pay your bills

Vocabulary

Square, Elevation, Backhoe, Lazer Level, Cubic Yards

Material List

Square, Backhoe, Lazer Level

GLEs (State Standards) addressed

Math 1.1.6, 1.2.6, 5.3.1, 5.3.2

Things to note

Customer will pay \$125.00 a day or \$500.00 a week for backhoe. Dump truck is \$35.00 for 5 yd load.

Customer will be 10 days digging.

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Your backhoe can move 3 cubic feet each dig.

Your dump truck can transport 10 yards each load, a round trip takes 1 hour.

Dirt can be sold for \$125.00 a load.

You can dig 25 scoops an hour.

You pay the operator \$18.00 per hour.

Dump truck and driver \$20.00 per hour.

Your maintance expenses for this job is \$325.00

Allowable profit 20%, Sales tax 7.9%

## https://wa-appliedmath.org/

$32'x22'x8' = \frac{5632}{3cf} = scoops$ $\frac{1877}{25} = 75$ hours	Hole 32' X 22' X 8'
$\frac{5632}{27cf} = 208$ yards	
$\frac{208}{10} = 20.8 \text{ loads}$ 21 loads	
Backhoe operator	1350.00
Dump truck operat	or 1550.00
Equipment expense	e <u>350.00</u>
	3250.00
20% P.O.	<u>_650.00</u>
	3900.00
Sales tax	<u>_308.10</u>
Customer price	\$4208.10
Dirt Sales	2625.00
Dift Sales	2023.00
Customer Costs	
42 loads	1470.00
Backhoe	1000.00
	2470.00
Tax	195.13
https://v	$W_{a=2665.13}$ led math org
Customer-2665.13	Bid-4208.10 Difference is 1542.97