# Question 1

Cost Classification

You have to try and find the unknowns using T accounts.

Just make sure each T has a Beginning ,added, transferred out and end ing balance. Round to two decimal places.

Because of water damage, you only have partial data:

| | |
|---|---|
| Prime Costs used | $500,000 |
| Gross Profit | 25% |
| Costs of Goods Available for sale | $655,000 |
| Direct Material purchased | $240,000 |
| Beginning Inventories: | |
| Raw Material | $32,000 |
| Work in Process | $66,000 |
| Finished Goods | $62,000 |
| Sales | $750,000 |
| Direct Labour Used | $280,000 |
| Factory Overhead | 42% of Conversion Costs |

(Indirect labour and materials, utilities, depreciation etc were 42% of Conversion cost...that is direct labour + manufacturing overhead)

# Question 2

Cryo does testing and has provided you with the following:

| | Number of Tests | Total Test Costs |
|---|---|---|
| Jan | 3125 | $ 14,000 |
| Feb | 3500 | $ 14,500 |
| Mar | 2500 | $ 11,500 |
| Apr | 2125 | $ 10,000 |
| May | 2250 | $ 11,000 |
| June | 1500 | $ 8,500 |
| July | 1550 | $ 8,400 |
| | | |
| Aug | 2750 | $ 12,000 |
| Sept | 2850 | $ 13,000 |

Use HI/LO to get the cost formula (fixed+(Variable*Volume))

What is the cost formula using regression...see below

At 2300 tests, what is the predicted costs? Which of the above two methods is best and why?

SUMMARY OUTPUT

| Regression Statistics | |
|---|---|
| Multiple R | 0.990735 |
| R Square | 0.981557 |
| Adjusted R Sq | 0.978922 |
| Standard Error | 319.8159 |
| Observations | 9 |

ANOVA

| | df | SS | MS | F | Signif F |
|---|---|---|---|---|---|
| Regression | 1 | 38104025 | 38104025 | 372.53823 | 2.5E-07 |
| Residual | 7 | 715975.3 | 102282.2 | | |
| Total | 8 | 38820000 | | | |

| | Coefficients | Std Error | t Stat | P-value | Lower 95% | Upper 95% |
|---|---|---|---|---|---|---|
| Intercept | 3500.591 | 424.5971 | 8.244501 | 7.517E-05 | 2496.578 | 4504.603 |
| X Variable | 3.223236 | 0.166996 | 19.30125 | 2.498E-07 | 2.828353 | 3.61812 |

## Question 3

Cost/Volume/Profit

T'Cruz has a Selling Price of $45 a unit and its Variable cost is $23
a unit. Fixed Costs total $140,000.

a)              Calculate the breakeven in units AND dollars
b)              How many units must be sold to make a $35,000 profit
c)              At the above (b) sales level, what is the DOL AND Margin of Safety %
d)              Xavier has sales this year of $700,000 and profits of $30,000. It has a
                DOL of 3.5. What is its Contribution Margin? If sales for next
                year are expected to be $900,000, What will the profit be?