Name: $\qquad$ Date: $\qquad$

1. Determine the amount of stock dextrose to make the required volume of $5 \%$ dextrose (C2). On the bottom of the graph locate the volume (V2) needed of $5 \%$ dextrose. Follow that point vertically to the sloped line representing the stock concentration (C1). Go to the left to determine the amount (V1) in milliliters required.


| Volume Required | Stock Concentration | Amount of Stock (ml) |
| :---: | :---: | :---: |
| 250 ml | $75 \%$ |  |
| 800 ml | $75 \%$ |  |
| 300 ml | $50 \%$ |  |
| 850 ml | $50 \%$ |  |
| 350 ml | $25 \%$ |  |
| 900 ml | $25 \%$ |  |
| 150 ml | $20 \%$ |  |
| 1000 ml | $20 \%$ |  |
| 200 ml | $10 \%$ |  |
| 650 ml | $10 \%$ |  |

2. Calculate V1 for $15 \%$ and $60 \%$ concentration of dextrose. Plot the four points and draw the two lines, one for $15 \%$ stock dextrose and one for $60 \%$ stock dextrose.

| Stock Concentration (C1) | Volume Required (V2) | Concentration Required (C2) | Stock Required (V1) |
| :---: | :---: | :---: | :---: |
| $15 \%$ | 50 ml | $5 \%$ |  |
| $15 \%$ | 1000 ml | $5 \%$ |  |
| $60 \%$ | 50 ml | $5 \%$ |  |
| $60 \%$ | 1000 ml | $5 \%$ |  |

Amount (V1) of Dextrose Concentration in Milliliters to Make 5\% Dextrose

3. Determine the amount of stock dextrose to make the required volume of $5 \%$ dextrose (C2). On the bottom of the graph locate the volume (V2) needed of $5 \%$ dextrose. Follow that point vertically to the sloped line representing the stock concentration (C1). Go to the left to determine the amount (V1) in ml required.

| Volume Required | Stock Concentration | Amount of Stock (ml) |
| :---: | :---: | :---: |
| 250 ml | $15 \%$ |  |
| 800 ml | $15 \%$ |  |
| 300 ml | $60 \%$ |  |
| 850 ml | $60 \%$ |  |

