

### SIG Codes

PO	by mouth
PRN	as needed
hs	at bedtime
qh	every hour
qd	every day
BID	twice a day
TID	three times a day
qid	four times a day
#	quantity

### Alligations

**When to use:** when you have to mix two solutions of different concentrations to prepare a final solution of the required concentration.

**What to do:** Make a grid with the goal solution in the middle, the lower strength % in the lower left, and the higher strength % in the upper left. Subtract across to the opposite corners of the grid. Add the two resultant parts of both % strengths and the result is the total parts ratio needed to make the desired strength. Now figure out how much of each solution should be added to equal the final concentration:

"Prepare 1000mL of 40% solution of amino acids using 70% amino acids and 30% amino acids solution."

70 | |10 (meaning 10 parts of the 70%)

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|40|

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30 | |30 (meaning 30 parts of the 30%)

10 + 30 = 40

Needed volume from the problem is:

1000mL / 40 = 25mL per part.

Take the values from the grid:

10 X 25mL = 250mL of the 70% solution.

30 X 25mL = 750mL of the 30% solution.

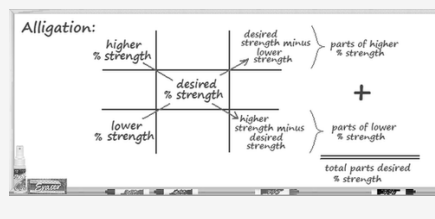
(Checking: 750mL + 250mL = 1000mL)

Simplified: 1 part 70% solution to 3 parts

30% solution, or 1:3 70%:30%.

**How much of each solution should be added to the concentration?**

### The Alligation Grid



### Conversions

	oz	g	mg	mcg	mL	L	gtt
1lb	16oz	453.59g	453,592mg	4.536e- +8mcg	453.59ml	0.45L	9,000
1kg	35.27oz	1000g	1mil mg	1e+9mcg	1000mL	1L	20,000
1oz	1oz	28.34g	28k mg	29mil mcg	29.57mL	0.03L	591.46
1tsp	0.16oz	5.69g	4,929mg	5mil mcg	4.92mL	0.0049L	59.146
1mg	3.52oz	0.001g	1mg	1,000mcg	0.001mL	0.000001L	0.0002
1g	0.03oz	1g	1000mg	1mil mcg	1mL	0.001L	0.0833
1mcg	3.52oz	1e-6g	0.001mg	1mcg	0.000001mL	0.0000- 00001L	0.0002
1L	33.81oz	1,000g	1mil mg	1mil mcg	1,000mL	1L	20,000
1gal	154oz	3,785gWT	3,785,- 412mg	4bil mcg	4,546mL	3.79L	75,700
1gtt	0.0018oz	0.083g	88.33mg	50,000mcg	0.05mL	0.0001L	1gtt
1mL	0.033oz	1g	1,000mg	100mcg	1mL	0.001L	20gtt
1pt	16oz	473.18g	473,176mg	2000mcg	473.18mL	0.47L	9,463.5
1gr	0.002oz	0.064g	64.79mg	64799mcg	0.06mL	0.000065L	0.0002

0.06ml