

So first, I'm going to enter my measurements using the symbols for the bara system. I'm using the symbol B for my chest measurement instead of C because that's what Alcega uses. I'm also using a snug chest measurement, not a relaxed one-- like I'm wearing a sports bra and not a normal one.

```
In[408]:= B = 30;
M =  $\frac{B}{2}$ ;
Q =  $\frac{M}{2}$  // N;
QQQ = Q * 3;
o =  $\frac{Q}{2}$ ;
t =  $\frac{B}{3}$  // N;
tt = 2 * t;
s =  $\frac{t}{2}$ ;
d =  $\frac{s}{2}$ ;
ii =  $\frac{d}{2}$ ;
i =  $\frac{ii}{2}$ ;
iii = i * 3;
```

Now we're going back to Alcega f 59a "a kirtle and low-cut bodice of silk"

```
kirtleFrontChest = t;
kirtleBackChest = s;
kirtleChestTotal = 2 * kirtleFrontChest + 2 * kirtleBackChest
```

Out[307]= 30.

That's actually my chest measurement! Yay!

```
In[312]:= kirtleBackWaist = s;
kirtleFrontWaist = Q;
kirtleWaist = 2 * kirtleBackWaist + 2 * kirtleFrontWaist
```

Out[314]= 25.

That's about right!

```
In[311]:= kirtleSkirtLength = B + M
```

Out[311]= 45

Waaaay too long, but we knew that. I usually use 38" as my waist-to-hem measurement. Generally this was successful!

Next, I'm going to try f 63a "skirt with bodice of cloth for a woman"

```

skirtBackChest = o + s;
skirtFrontChest = 2 * s;
skirtChest = 2 * skirtBackChest + 2 * skirtFrontChest

```

Out[320]= 8 . 75

Out[322]= 37 . 5

OK, to be fair, the front chest is not clearly indicated here. The shoulder strap is “s” thick and then the neck hole is labeled “s” but it’s not exactly s wide at the bustline. I might try and back-derive it

In[371]:=

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skirtFrontChestCorrected = 
$$\frac{(30 - 2 * \text{skirtBackChest})}{2}$$


```

Out[371]= 6 . 25

That's a narrower front than the kirtle, but the the kirtle had 2/3rds of the chest on the front piece and only 1/3rd on the back panel. This will result in a side seam that's skewed backwards slightly but not all the way to a side-back seam. This bodice has the same waist measurements indicated as the kirtle, so no need to do that. The back neck to waist is M, or 15" (for me) which is about right! I think you'd run into a problem if you were short and wide though.

The gowns and mourning coats are quite loose, so other than the shoulder there's not much to fit. I think I can definitely say that my first go at this was wrong, and that the measurements are the *total* widths and lengths, and not the lengths of the seams they're drawn next to. I believe this is how Gnagy drafts his patterns as well.