








Crunching the numbers: Overall Warp Length



THE
Handweaving
Academy

Overall Warp Length

<i>Items of type 1</i>	<p>Desired length of single item, including length for hems $\times (1 + \text{percentage of expected loss})^*$ = Woven length of each individual item \times Number of items to be woven = Total woven length of items of type 1</p>	<p>..... \times _____ = _____ \times _____ = </p>
<i>Items of type 2</i>	<p>Desired length of single item, including length for hems $\times (1 + \text{percentage of expected loss})^*$ = Woven length of each individual item \times Number of items to be woven = Total woven length of items of type 2</p>	<p>..... \times _____ = _____ \times _____ = </p>
<i>Total woven length</i>	<p>Total woven length of items of type 1 + Total woven length of items of type 2 = Total woven length of all items</p>	<p> +  = </p>
<i>Overall warp length</i>	<p>Length needed for fringes between ALL items + Loom waste + Total woven length of all items = Overall warp length</p>	<p>..... + _____ +  = </p>

* For example, if your expected loss is 15%, multiply by $(1 + 0.15) = 1.15$



The worksheet has space for two different types or lengths of items, such as placemats vs. a runner, or two scarves of different lengths.

If your project has only one type and length of item, ignore the section for “Items of Type 2.”

If your project has more than two types or lengths of items, such as placemats and runners of two different lengths, or three scarves all of different lengths, repeat the “Items of Type #” section as many times as needed, and include all of their combined woven lengths in the Total Woven Length calculation.

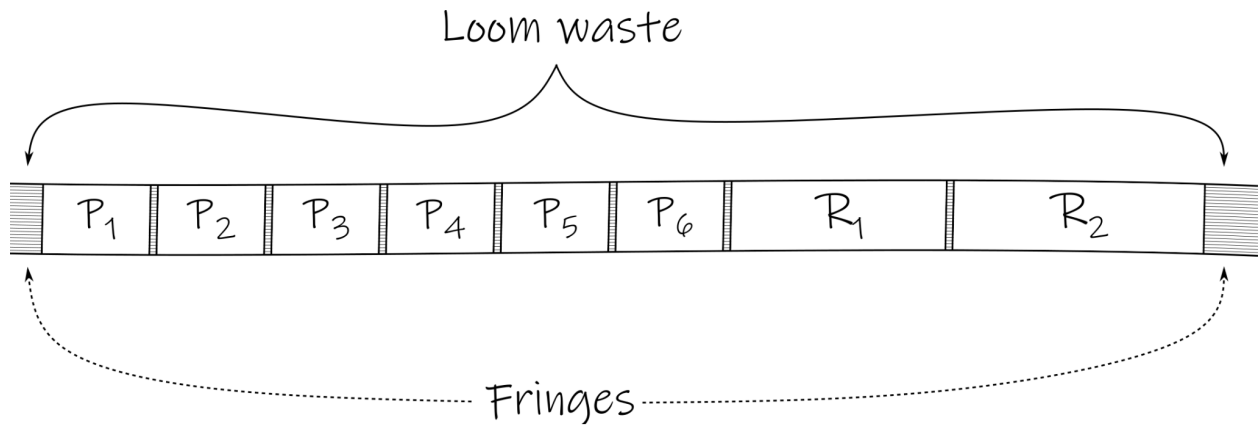
Example:

On the next page you’ll find an example of the worksheet used to calculate the warp length for a set of six placemats 17” long and two runners 40” long all woven on the same warp like so:

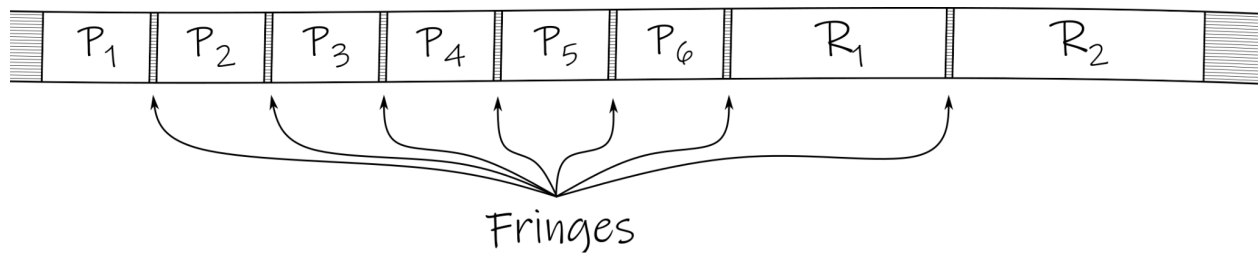


The placemats all have the same dimensions, so they can be grouped together into one type. The runners are a different length from the placemats but the same length as each other, so they’re a second type.

To determine how much length to add for fringes, count how many “betweens” there are of each fringe length. The fringe at the start of the first piece and at the end of the last one can come from the loom waste...



...so we don't need to add any extra warp length for those, but we DO need to add length for all of the fringes *between* items:



We have eight pieces total (6 placemats + 2 runners) so we have $8 - 1 = 7$ "betweens." Each "between" is 2" long - the 1" at the end of one piece plus the 1" at the start of the next. 7 "betweens" x 2" each = 14" for fringe.

Note: If the runners were going to have longer fringes than the placemats, we'd need to account for that, too.



<i>Items of type 1</i>	Desired length of single item, including length for hems	17
	x (1 + percentage of expected loss)*	----- x 1.15
	= Woven length of each individual item	----- = 19.55
	x Number of items to be woven	----- x 6
	= Total woven length of items of type 1	----- = 117.3
<i>Items of type 2</i>	Desired length of single item, including length for hems	40
	x (1 + percentage of expected loss)*	----- x 1.15
	= Woven length of each individual item	----- = 46
	x Number of items to be woven	----- x 2
	= Total woven length of items of type 2	----- = 92
<i>Total woven length</i>	Total woven length of items of type 1	117.3
	+ Total woven length of items of type 2	----- + 92
	= Total woven length of all items	----- = 209.3
<i>Overall warp length</i>	Length needed for fringes between ALL items	14
	+ Loom waste	----- + 36
	+ Total woven length of all items	----- + 209.30
	= Overall warp length	----- 259.3

* For example, if your expected loss is 15%, multiply by $(1 + 0.15) = 1.15$