

Masterclass Event No.	CMS ID Run/Event/LS	Event Type (check one)			Zoo	Calculated Mass (GeV)	Rounded Z Mass (GeV)
		Z	W - elec	W - muon			
121	147390/629527679/795					3.2	
122	146944/198300075/253					36.9	
123	146944/231851999/275					28.2	
124	148031/223702008/263					90.5	
125	146944/576975576/521					58	
126	146944/232185924/276					29.6	
127	148031/158955382/185					90.7	
128	146944/565771882/513					82.6	
129	146944/232159281/276					26.2	
130	146944/582556101/526					86.9	
131	146944/232815808/276					25.2	
132	142137/86384176/144					72.6	
133	146944/295609733/319					53.4	
134	146944/309886356/329					73.5	
135	146944/292751902/317					54	
136	148031/155570482/181					89	
137	146944/565060908/513					58.5	
138	146944/199897882/254					69.7	
139	147390/615939803/775					4	
140	147390/95327355/107					4.6	
141	146944/566256380/514					56.3	
142	146944/652319376/578					77.5	
143	148031/152965954/177					94.7	
144	146944/583502460/526					56	
145	146944/200013589/254					53.8	
146	148031/222737678/262					119.5	
147	146944/274499255/305					26.6	
148	147114/492014601/490					44.3	
149	146944/309159762/329					44.1	
150	146944/287061444/313					51.6	
151	146944/232006436/276					72.5	
152	146944/230950944/275					68.7	
153	146944/564221907/512					76.4	
154	146944/275134157/305					53.4	
155	148031/223205127/263					92.9	
156	148031/162098654/188					84.3	
157	148031/163592815/190					90	
158	146944/390452926/386					31	
159	148031/163375649/190					85.6	
160	146944/307481786/328					3.9	

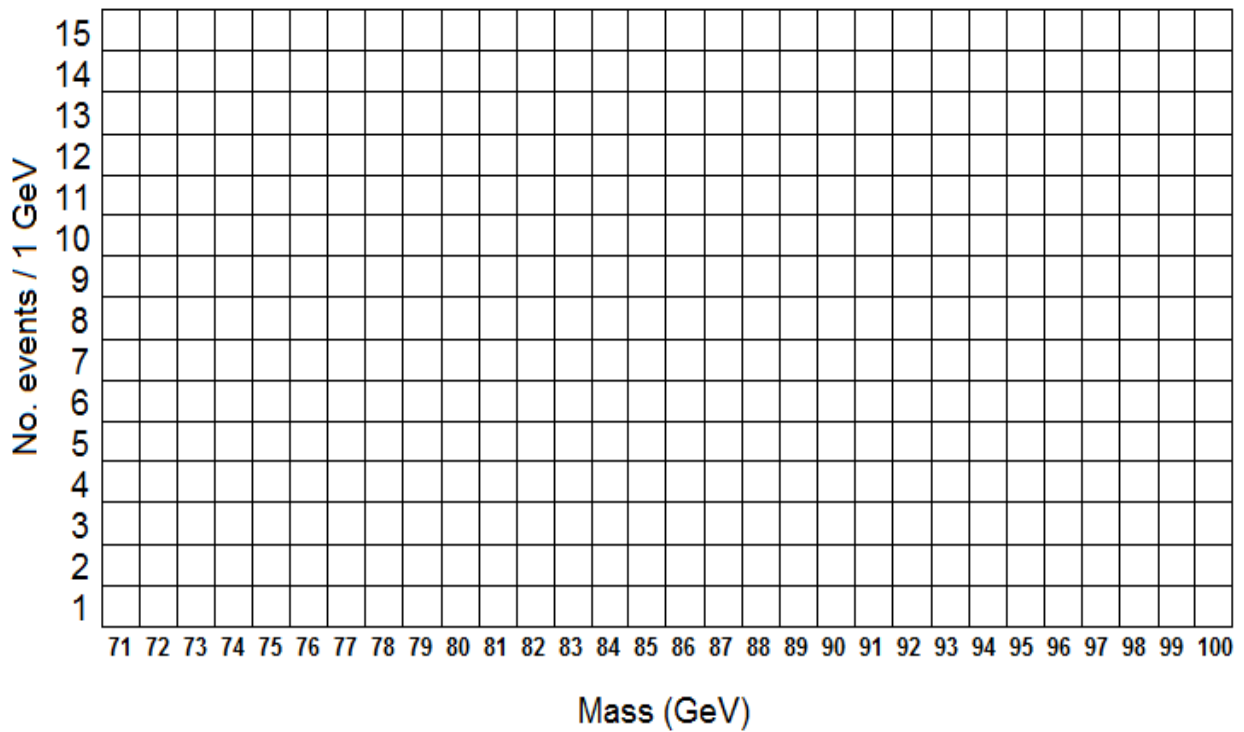
Count the total number of W-electron candidates and the total number of W-muon candidates.

Calculate electron-to-muon ratio:

No. e	No. μ	e/μ

Contribute your numbers of e and μ to group totals.

Your Z mass plot:



Place an X in the appropriate mass bin for each event. Start from the bottom so that the vertical axis represents the number of events in that bin.

Contribute the total number of events in each bin to the group mass plot.