

12 Markers

Distance	Relatedness	Explanation
0	Related	Your perfect 12/12 match means you share a common male ancestor with a person who shares your surname (or variant). These two facts demonstrate your relatedness, however if your name is one of the most common surnames, i.e. Smith, Taylor, Miller, etc, (trades or towns) then we always suggest you utilize additional markers to eliminate the possibility of a coincidental surname and genetic match.
1	Possibly Related	You share the same surname (or a variant) with another male and you mismatch by only one 'point' on only one marker. For most closely related or same surnamed individuals, the mismatch markers are either DYS 439 or DYS 385 A, 385 B, 389-1 and 389-2. To ensure that the match is authentic you should utilize additional markers.
2	Probably Not Related	You share the same surname (or a variant) but are off by 2 'points' or 2 locations on just 12 markers. It is only possible that you and another related family members' line each have had a mutation. There are two ways with DNA testing to confirm or deny. One is to test additional family members to search for a line that shows a mutation that is 1 point closer to your sample. The other is to test additional markers. Refining greatly enhances science's ability to determine relatedness -- geared towards the most accurate assessment of the number of generations to a shared ancestor. Only by further testing can you find the person in between each of you...this in 'between' becomes essential for you to find, and in their absence we feel you are not related.
3	Not Related	9/12 - is too far off to be considered related. Unlikely but vaguely possible that the rule for Probably Not Related applies.
4	Not Related	8/12 - You are not related and the odds greatly favor that you have not shared a common male ancestor with this person within thousands of years.
5	Not Related	7/12 - You are not related and the odds greatly favor that you have not shared a common male ancestor with this person within thousands of years.
>5	Not Related	You are totally unrelated to this person.

Distance	Relatedness	Explanation
0	Related	Your perfect 25/25 match means you share a common male ancestor with a person who shares your surname (or variant). These two facts demonstrate your relatedness.
1	Related	You share the same surname (or a variant) with another male and you mismatch by only one 'point' on only one marker. For most closely related and same surnamed individuals, the mismatch markers are usually either DYS 439 or DYS 385 A, 385 B, 389-1 and 389-2 from our first panel of 12 markers, and on the following from the second panel: DYS #'s 458 459 a 459b 449, 464 a-d, which have shown themselves to move most rapidly. The probability of a close relationship is very high.
2	Probably Related	You share the same surname (or a variant) with another male and you mismatch by two 'points' among the 25 markers we tested. For most closely related and same surnamed individuals, the mismatch markers are usually either DYS 439 or DYS 385 A, 385 B, 389-1 and 389-2 from our first panel of 12 markers, and on the following from the second panel: DYS #'s 458 459 a 459b 449, 464 a-d, which have shown themselves to move most rapidly. The probability of a close relationship is good, however your results show mutations, and therefore more time between you and the other same surnamed person.
3	Probably Not Related	You share the same surname (or a variant) but are off by 3 'points' or 3 locations on the 25 markers tested. If enough time has passed it is possible that you and another distantly related family members' line each have had a mutation, or perhaps 2. The only way to prove that is to test additional family lines and find where the mutation took place. Only by further testing can you find the person in between each of you... this in 'betweenner' becomes essential for you to find, and in their absence the possibility of a match exists, but further evidence should be pursued.
4	Not Related	21/25 is too far off to be considered related. Unlikely but vaguely possible that the rule for ONLY "Probably Not Related" applies. It is important to determine what set of results (or haplotype) most typifies 'most' members of the group you are close to matching. You may be 21/25 with an individual, but 23/25 with the center (most common) of the group, and your potential relatedness to him is through the center of the group.
5	Not Related	20/25 You are not related and the odds greatly favor that you have not shared a common male ancestor with this person in excess of 2,000 years.
6	Not Related	19/25 You are not related and the odds greatly favor that you have not shared a common male ancestor with this person in excess of 5,000 years.
>6	Not Related	You are totally unrelated to this person.

Distance	Relatedness	Explanation
0	Very Tightly Related	37/37 Your perfect match means you share a common male ancestor with a person who shares your surname (or variant). Your relatedness is extremely close with the common ancestor predicted, 50% of the time, in 5 generations or less and with a 90% probability within 16 generations. Very few people achieve this close level of a match. <u>All</u> confidence levels are well within the time frame that surnames were adopted in Western Europe.
1	Tightly Related	36/37 You share the same surname (or a variant) with another male and you mismatch by only one 'point' at only one marker--a 36/37 match. It's most likely that you matched 24/25 or 25/25 on a previous Y-DNA test and your mismatch will be found within DYS 576, 570, CDYa or CDYb. Very few people achieve this close level of a match. Your mismatch is within the range of most well established surname lineages in Western Europe.
2	Related	35/37 You share the same surname (or a variant) with another male and you mismatch by only two 'points' --a 35/37 match. It's most likely that you matched 24/25 or 25/25 on previous Y-DNA tests and your mismatch will be found within DYS 439 or DYS 385 A, 385 B, 389-1 and 389-2, from our first panel of 12 markers, or from within the second panel at DYS #'s 458, 459 a, 459b, 449, or within 464 a-d. If you matched exactly on previous tests you probably have a mismatch at DYS 576, 570, CDYa or CDYb in our newest panel of markers. Your mismatch is likely within the range of most well established surname lineages in Western Europe.
3	Related	34/37 You share the same surname (or a variant) with another male and you mismatch by three 'points' --a 34/37 match. Because of the volatility within some of the markers this is slightly tighter than being 11/12 or 23/25 and it's most likely that you matched 24/25 or 25/25 on previous Y-DNA tests. Your mismatch will most often be found within DYS 439 or DYS 385 A, 385 B, 389-1 and 389-2 from our first panel of 12 markers, or within the second panel: DYS #'s 458, 459 a, 459b, 449, or within 464 a-d. If you matched exactly on previous tests you probably have a mismatch at DYS 576, 570, CDYa or CDYb in our newest panel of markers. Your mismatch is likely within the range of most well established surname lineages in Western Europe.
4	Probably Related	33/37 You share the same surname (or a variant) with another male and you mismatch by four 'points' --a 33/37 match. Because of the volatility within some of the markers this is about the same as being 11/12 and it's most likely that you matched 23/25 or 24/25 on previous Y-DNA tests. If you matched exactly on previous tests you probably have a mismatch at DYS 576, 570, CDYa or CDYb in our newest panel of markers. If several or many generations have passed it is likely that these two lines are related through other family members. That would require that each line had passed a mutation and one person would have experienced at least 2 mutations. The only way to confirm is to test additional family lines and find where the mutations took place. Only by testing additional family members can you find the person in between each of you...this 'in betweener' becomes essential for you to find, and without him the possibility of a match exists, but further evidence must be pursued. If you test additional individuals you will most likely find that their DNA falls in-between the persons who are 4 apart demonstrating relatedness within this family cluster or haplotype.
5	Only Possibly Related	32/37 You share the same surname (or a variant) with another male and you mismatch by five 'points' --a 32/37 match. It is most likely that you did not 12/12 or 24/25 or 25/25 in previous Y-DNA tests. If several or many generations have passed it is possible that these two group members are related through other family members. That would require that each line had experienced separate mutations and one person would have experienced at least 2 mutations. The only way to confirm or deny is to test additional family lines and find where the mutation took place. Only by testing additional family members can you find the person in between each of you...this 'in betweener' becomes essential for you to find, and without him only the possibility of a match exists, further evidence should be pursued. If you test additional individuals you must find the person whose DNA results falls in-between the persons that are 5 apart demonstrating relatedness within this family cluster or haplotype.
6	Not Related	31/37 is too far off to be considered related, unless you can find an "in-betweener" as for determining 'Only Possibly Related,' above. It is important to determine what set of results most typifies the largest number members of the group you are 'close' to matching. You may be 31/37 with an individual, but 34/37 with the center of the group, and your potential relatedness to him is through the center of the group.
Beyond 6	Not Related	30/37 You are not related and the odds greatly favor that you have not shared a common male ancestor with this person within thousands of years. You are probably even in different Haplogroups on the Phylogenetic tree of <i>Homo Sapiens</i> .

	Relatedness	Explanation
0	Very Tightly Related	67/67 Your perfect match means you share a common male ancestor with a person who shares your surname (or variant). Your relatedness is extremely close with the common ancestor predicted, 50% of the time, in 3 generations or less and with a 90% probability within 5 generations. Very few people achieve this close level of a match. All confidence levels are well within the time frame that surnames were adopted in Western Europe.
1-2	Tightly Related	65-66/67 You share the same surname (or a variant) with another male and you mismatch by only one or two 'points' at only one marker. It's most likely that you matched 36/37 or 37/37 on a previous Y-DNA test. Very few people achieve this close level of a match. All confidence levels are well within the time frame that surnames were adopted in Western Europe.
3-4	Related	63-64/67 You share the same surname (or a variant) with another male and you mismatch by only three or four 'points'. It's most likely that you matched 24/25, 36/37 or 37/37 on previous Y-DNA tests and your mismatch will be found within the second panel at DYS #'s 458, 459 a, 459b, 449, or within 464 a-d, or at DYS 576, 570, CDYa or CDYb in our third panel of markers. Your common ancestor is probably not extremely recent, but your mismatch is likely within the range of most well established surname lineages in Western Europe.
5-6	Related	61-62/67 You share the same surname (or a variant) with another male and you mismatch by five or six 'points'. Because of the volatility within some of the markers this is slightly tighter than being 11/12, 23/25, or 33/37, and it's most likely that you matched closely on previous Y-DNA tests. It's most likely that you matched 24/25, 36/37 or 37/37 on previous Y-DNA tests and your mismatch will be found within the second panel at DYS #'s 458, 459 a, 459b, 449, or within 464 a-d, or at DYS 576, 570, CDYa or CDYb in our third panel of markers. Your common ancestor is not very recent, but your mismatch is likely within the range of most well established surname lineages in Western Europe.
7	Probably Related	60/67 You share the same surname (or a variant) with another male and you mismatch by seven 'points'. Because of the volatility within some of the markers this is about the same as being 11/12 and it's most likely that you matched 23/25 or 24/25 or 33-34/37 on previous Y-DNA tests. If several or many generations have passed it is likely that these two lines are related through other family members. The only way to confirm is to test additional family lines and find where the mutations took place. Only by testing additional family members can you find the person in between each of you...this 'in between' becomes essential for you to find, and without him the possibility of a match exists, but further evidence must be pursued. If you test additional individuals you will most likely find that their DNA falls in-between the persons who are 7 apart demonstrating relatedness within this family cluster or haplotype.
8-9	Only Possibly Related	58-59/67 You share the same surname (or a variant) with another male and you mismatch by eight or nine 'points'. It is most likely that you did not match 24-25/25 or 35-37/37 in previous Y-DNA tests. If several or many generations have passed it is possible that you are related through other family members. The only way to confirm or deny is to test additional family lines and find where the mutation took place. Only by testing additional family members can you find the person in between each of you...this 'in between' becomes essential for you to find, and without him only the possibility of a match exists, but further evidence should be pursued. If you test additional individuals you must find the person whose DNA results falls in-between the persons that are 8 or 9 apart demonstrating relatedness within this family cluster or haplotype.
10-11	Not Related	56-57/67 is too far off to be considered related, unless you can find an "in-between" as for determining 'Only Possibly Related,' above. It is important to determine what set of results most typifies the largest number members of the group you are 'close' to matching. You may be 57/67 with an individual, but 61/67 with the center of the group, and your potential relatedness to him is through the center of the group.
Beyond 11	Not Related	55/67 You are not related and the odds greatly favor that you have not shared a common male ancestor with this person within thousands of years.