

## ***Action Unit Combinations - 12+15, 12+15+17, 6+12+15, 6+12+15+17***

You learn these combinations together because these scores involve similar issues. Whenever you score the combination of 12 and 15, you must take careful note of the intensity of 12 and 15, and whether or not 6 is also present. The intensity of 15 influences the discrimination of the appearance changes due to AU 6 from those due to AU 12. The addition of 17 to the combination of 12 and 15 complicates what evidence is needed to score the intensity of AU 15. The section for intensity scoring is more extensive for these combinations in order to provide a procedure to resolve these complex scoring issues.

### **A. Appearance Changes due to 12+15, 12+15+17, 6+12+15, 6+12+15+17**

#### **6+12+15B, 12+15B, 12+15C/D**

In all these combinations of 12+15, AU 15 prevents the lip corners from angling up as they would if AU 12 acted alone. Instead, AU 15 angles the lip corners somewhat downward. Scoring 12+15 is straightforward when 15 is at A or B intensity and 12 is at any intensity level, whether 6 is present or not. Scoring 12+15 is also easy when 15 is at C or D intensity and 12 is at any intensity, but when 6 is also present, the 12 action becomes harder to see and score. The combination 6+12+15E is difficult to discriminate from 6+15E.

1. The skin in the areas of the lower middle portion of the nasolabial furrow is pulled up and laterally by 12.
2. The upper portion of the nasolabial furrow may be deepened by 12.
3. The infraorbital triangle is raised by 12.
4. If the action of 12 is strong (12E) or if 6 is added to 12A, 12B, 12C, or 12D, one or more of the following:
  - a. Deepens the infraorbital furrow.
  - b. Causes bags and wrinkles below the lower eyelid.
  - c. Narrows the eye aperture by pushing up the cheek and skin below the lower lid.
  - d. Causes crow's feet wrinkles.
5. The corners of the lips are angled down due to the action of 15 overcoming the upward pull of 12. The stronger the AU 12 is in relation to the strength of AU 15, the less downward angle there is to the lip corner pull of 15, but the corners are not up as they would be from 12 alone. If bags or pouches appear below the lip corners, and a medial depression under the lower lip, it is 15C, 15D, or 15E not 15A or 15B.

#### **6+12+15B+17, 12+15B+17, 12+15C/D+17**

Appearance changes 1 through 4 above remain unchanged, and the addition of AU 17:

6. Pulls the chin boss upwards and pushes up the lower lip.
7. Causes wrinkles to appear on the chin boss as skin is stretched and may cause a depression medially under the lower lip.
8. The downward angle of the lips due to AU 15 is emphasized by the addition of 17, as are the bags or pouches below the lip corners and the medial depression under the lower lip. Since 17 adds strength to these cues of 15, the action of 17 must be taken into account when determining the intensity of AU 15.

#### **6+12+15E, 6+12+15E+17**

Examine images 6+15ii and w6+15ii, which show 15 at an E level. Imagine that 12 was added to the combination 6+15E. If you see the movement showing the actual addition of AU 12 to the already present 6+15E, you would be able to see some appearance changes occur due to the 12 action: the skin in the area of the lower-middle portion of the nasolabial furrow would be pulled up and laterally, and the nasolabial furrow would deepen. If, however, you only see the static end product of the three AUs, 6+12+15E, it can be difficult to attribute any of the appearance changes to AU 12 since 6 and 12 share many of their appearance changes, and those appearance changes 12 does not share with 6 (e.g., angle of the lip cor-

ners) are counteracted by 15E, especially when the intensity of 12 is less than that of 15, or are so subtle that they can be difficult to detect in a static combination. Therefore, scoring 6+12+15E in a still photo or when the movements occur with all three AUS acting simultaneously is very difficult. You can score 6+12+15E more easily if the action of 12 occurs independently of 6 or 15E. For example, 6+12 may occur first on the face and be held while 15E is added, or the whole action may occur simultaneously, but then you see the 6 drop out while the 12+15E remains, and then the 12+15E fades, etc. Look for the upward movement of the outer portion of the cheeks and upward pull on the lip corners as signs of the action of 12. It is very important to distinguish among 12+15, 6+12+15, 6+15, and 15 alone.

Examine the image 6+15+17, which shows 15 at an E level. The addition of 12 to the combination 6+15E+17 depicted in this image would create the same problems as just described and this combination is very difficult to score unless 12 is seen independently of 6 or 15E. Remember that most of the cues of AU 15 are exaggerated by the addition of 17. Therefore, what may appear to be evidence of 15E may in fact have resulted from the 17 adding to the cues a moderate 15, which was not actually at the E level of intensity.

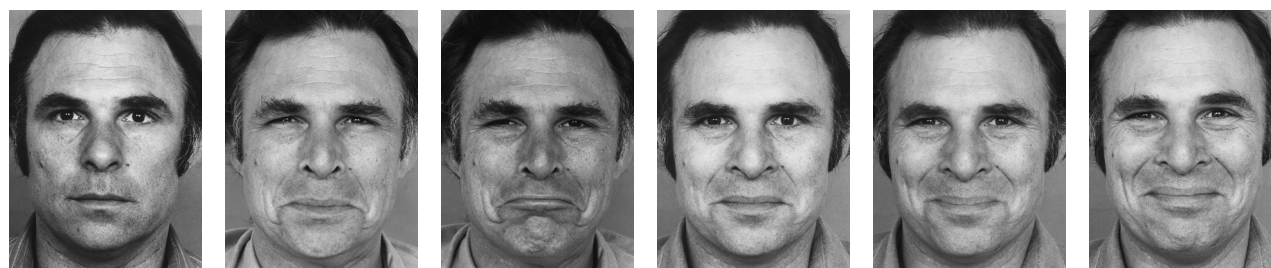
### **6+12+15C/D, 6+12+15C/D+17**

These combinations are the most difficult to recognize and distinguish from 6+15C/D, 6+15E, 6+15C/D+17 or 6+15E+17. The appearance of the combination depends upon the strength of 12 and whether the 15 is C or D:

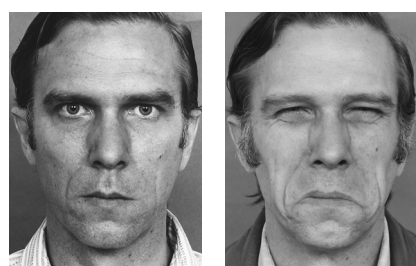
- With 6, a 12B and a 15C, it will look like 6+15B.
- With 6, a 12B and a 15D, it will look like 6+15E.
- With 6, a 12C/D and a 15C, it will look like 6+12E+15B.
- With 6, a 12C/D and a 15D, it will look like either 6+15C/D, or 6+12E
- With 6, a 12E and a 15C, it will look like 6+12E+15B.
- With 6, a 12E and a 15D, it will combine appearances of 6, 12 and 15. It will differ from 6+15E, in that 12 will be recognized by the raising of the infraorbital triangle more than just by 6+15E, and by the pulling of the skin adjacent to the middle portion of the nasolabial furrow or the furrow itself being in an up and lateral direction.

The addition of AU 17 to these variations of 12 and 15 in combination with AU 6 also raises the chin and pushes up the lower lip. However, if the effects of 17 on the appearance changes due to 15 have been taken into account in scoring the intensity of AU 15, then the apparent outcomes of these combinations will be altered only by the addition of the unique cues of AU 17.

Examine the images 6+12B+15B, 6+12C+15B, 6+12E+15C, 6+15i, 6+15ii, w6+15i and w6+15ii. Also study the video of 12+15 and 6+15. Be very attentive to the signs of 12 which can be observed even though the angles of the lips do not take the shape of the primary appearance change for AU 12 when 15 is not present. To see the effect of 17 on the signs of 15, and to study further the problems that are encountered in determining if 12 is present when 15 or 6+15 are on the face, compare the images 12+17 and 6+12+17 with images 6+12+15+17i and 6+12+15+17ii (low and higher intensities) with the images you have already been instructed to study. Study the video of 12+15+17 and 12+17 and compare them with the video of 12+15.



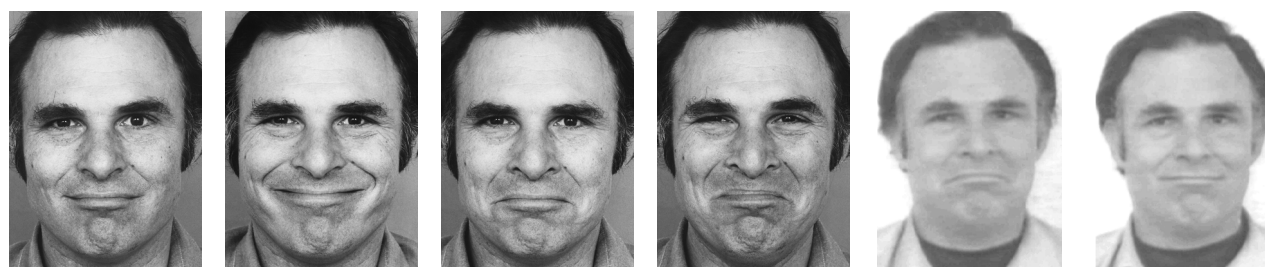
0 [page 465](#)      6+15ii [page 476](#)      6+15+17 [page 480](#)      6+12B+15B [page 489](#)      6+12C+15B [page 490](#)      6+12E+15C [page 490](#)  
[page 381](#) for score    [page 392](#) for score    [page 395](#) for score    [page 405](#) for score    [page 405](#) for score    [page 405](#) for score



w0 [page 465](#)      w6+15ii [page 476](#)  
[page 382](#) for score    [page 392](#) for score



video 12+15 [page 424](#) for score      video 6+15 [page 424](#) for score



12+17 [page 489](#)      6+12+17 [page 489](#)      6+12+15+17i [page 490](#)      6+12+15+17ii [page 490](#)      video 12+15+17 [page 424](#) for score      video 12+17 [page 424](#) for score  
[page 404](#) for score    [page 404](#) for score    [page 406](#) for score    [page 406](#) for score

## B. How to do 12+15, 12+15+17, 6+12+15, 6+12+15+17

Follow the instructions for AU 6, AU 12, AU 15, and AU 17, repeated below. Try adding a 15B to 12B, to 6+12B and to 6+12E. Then do a 15E, noting how appearance change 5 in Section A above becomes evident. Add 6 to 15E. Then add a 6+12 to 15E and notice how similar it looks to 6+15E. Repeat these instructions adding and removing AU 17 from each combination.

**AU 6** (repeated from [page 32](#)): This action is difficult to produce on demand without including other actions, especially 7. Concentrate on lifting your cheeks without actively raising up the lip corners (that is AU 12). Take time in trying this Action Unit as it may not be possible to do it at first. If you have difficulty:

- Try making AU 15 (see the AU 15 description on [page 100](#)). While holding 15 on your face try to lift your cheeks upwards. Once you can do 6+15, try 6 alone.

- Try AU 9 (see the AU 9 description on [page 93](#)), while holding it on your face add 6. Once you can do 6+9, try 6 alone.
- Try AU 12 (see the AU 12 description below), note what happens around your eyes. Now try to do that same appearance without moving your lip corners.
- Try winking, using your cheek in the wink. Note how your cheek lifts. Now do that cheek lift without the wink.
- Try squinting your eyes as though to block out a bright sun, and although this motivation is likely to produce AUs 4 and 7 as well, you can refine these movements to exclude all but AU 6.

**AU 12** (repeated from [page 179](#)): This movement is an easy to do. Smile. Imitate image 12i. Holding a weak version on your face, slowly increase the extent of action and watch as your face begins to resemble 6+12ii and 6+12+25ii.

**AU 15** (repeated from [page 101](#)): Pull your lip corners downwards. If you are unable to do AU 15, place your fingers above the lip corners and push downwards, noting the changes in appearance. Now, try to hold this appearance when you take your fingers away.

**AU 17** (repeated from [page 98](#)): This movement is easy to do. Push your lower lip upwards. Note the wrinkles in your chin, and the change in the shape of the lower lip. If you are unable to make this movement, place your fingers on your chin about in the middle and push the skin upwards, noting the changes that occur. Now try to hold this appearance when you take your fingers away.

### C. Intensity scoring for 12+15, 12+15+17, 6+12+15, 6+12+15+17

This section differs from any previous Section C, in that it specifies a series of steps you must follow in order to clarify the confusion which is possible between 6+15 and 12+15, 6+15+17 and 12+15+17 or 12+15 and 12+17. Determining which AUs are present depends, in part, on the intensities of the AUs present. Follow these steps if you are considering scoring both AUs 12 and 15 in any combination with other AUs.

#### STEP 1: Is AU 17 involved?

The first step is to determine if there is evidence of 17. This determination affects whether you have sufficient evidence to score AU 15 and its intensity score. Whether the evidence is sufficient for scoring AU 17 is relatively simple to determine. Use the same criteria as for scoring the combination 15+17 or 17 alone, repeated below. Thus, Step I consists of scoring AU 17, if present, and its intensity using the following guidelines.

#### AU 17A

The appearance changes for AU 17 are sufficiently present to indicate AU 17, but are insufficient to score 17B (e.g., a *trace* of lower lip pushed up and/or *trace* of chin boss wrinkling).

#### AU 17B

1. *Slight* evidence of lower lip push up beyond the movement necessary to close the lips; may include lip protrusion, or depression in medial area under the red part of the lip. The lower lip may slide in front of the upper lip and expose more of the red part of the lip than usual.  
or
2. *Slight* chin boss wrinkling or puckering, and upward movement of chin boss. If the chin boss is permanently wrinkled, it must increase *slightly*. AU 15 may cause similar chin wrinkling, but they differ in appearance. See 15 vs. 17 in subtle differences.

#### AU 17C

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both evident and at least one is *marked*, but the evidence is less than the criteria for 17D.

### AU 17D

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both evident and at least one is *severe*, but the evidence is less than the criteria for 17E.

### AU 17E

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both in the *maximum* range.

### STEP II: Is AU 15 involved?

The next decision is whether there is evidence of 15. You must resolve this issue because of the special problems created by combining the appearance changes due to 15 and 12. You must see evidence that the lip corners have been pulled down by 15. Such evidence of 15 is not as apparent in the combination of 12+15 because the possible involvement of 12 may somewhat counteract the pulling down of 15. In the combination of 12+15+17, 17 adds to the downturned appearance and the other appearance changes of 15 in the chin and corners of the lips. Therefore, to score 15 with 12+17 you must have more evidence that the lip corners are down than you would need if 17 were not involved when you do not see the lip corners being pulled down independent of the changes due to 17's action (as would be the case in a still photo).

If you have already determined that AU 17 is not involved, then the criteria for scoring 15 and its intensity are the same as for 15 alone, repeated below. Use these scoring guidelines to score 15 and its intensity.

### AU 15A

The appearance changes for AU 15 are sufficiently present to indicate AU 15, but are insufficient to score 15B (e.g., a *trace* of the lip corners moving down).

### AU 15B

1. If the lip line is straight or *slightly* up in neutral the lip corners move *slightly* down.  
or
2. If lip line is *slightly* or barely down in neutral, then the lip corners move down *slightly* more than neutral and it is not due to 17 or 20.

### AU 15C

The appearance changes 1 (lip corners pulled down), 2 (lip shape angled and stretched down), and 3 (bulging, wrinkling) in 15secA are all present and the downward movement of the lip corners is at least *marked*, but the evidence is less than the criteria for 15D.

### AU 15D

The appearance changes 1 (lip corners pulled down), 2 (lip shape angled and stretched down), and 3 (bulging, wrinkling) in 15secA are all present and the downward movement of the lip corners is at least *severe*, but the evidence is less than the criteria for 15E.

### AU 15E

The appearance changes 1 (lip corners pulled down), 2 (lip shape angled and stretched down), and 3 (bulging, wrinkling) in 15secA are all present and all at least *marked* and the downward movement of the lip corners is in the *extreme* to *maximum* range.

If in Step 1 you concluded that 17 is involved, use the guidelines for scoring 15 in 15+17, repeated below, to score 15 and its intensity in the combinations 6+12+15+17, 12+15+17.

**AU 15A in Combinations 15A+17A, 10+15A+17A, 6+12+15A+17A, 12+15A+17A, etc.**

The appearance changes for AU 15 are sufficiently present to indicate AU 15, but are insufficient to score 15B (e.g., a *slightly* more downward curvature than in 17 alone).

**AU 15B in Combinations 15B+17B, 10+15B+17B, 6+12+15B+17B, 12+15B+17B, etc.**

1. Lip corners pulled down *slightly*.  
or
2. The curve of the lips is *markedly* more down than it is in 17 alone or 10+17; if there are bags, pouches or wrinkles, they are much more evident than it is from 17 alone or 10+17.

If you do not see the movement, criterion 2 (*markedly* more downward curve) must be used.

**AU 15C in Combinations 15C+17C, 10+15C+17C, 6+12+15C+17C, 12+15C+17C, etc.**

Appearance changes 7 (lip corners pulled down), 8 (changed, inverted-U shaped lip) and 9 (pouching, bagging, or wrinkling below lip corners) are all present and at least one must be *pronounced* in 10+15C+17 or 15C+17, but the evidence is less than the criteria for 15D in 15+17.

**AU 15D in Combinations 15D+17D, 10D+15D+17D, 6+12+15D+17D, 12+15D+17D, etc.**

Appearance changes 7 (lip corners pulled down), 8 (changed, inverted-U shaped lip, and 9 (pouching, bagging, or wrinkling below lip corners) are all present and at least *marked* and at least one is *extreme* in 10+15D+17 or 15D+17, but the evidence is less than the criteria for 15E in 15+17.

**AU 15E in Combinations 15E+17E and 10E+15E+17E**

Appearance changes 7 (lip corners pulled down), 8 (changed, inverted-U shaped lip), and 9 (pouching, bagging, or wrinkling below lip corners) are all present and at least *severe* and at least one is *maximum* in 10+15E+17 or 15E+17.

If you decide 15 is not involved, go to Step III.

If you decide 15 is involved, then you should now have added a score for 15 and its intensity. You follow a different procedure, depending upon the intensity of 15:

- 15A or 15B – Go to STEP IV
- 15C or 15D – Go to STEP V
- 15E – Go to STEP VI.

**STEP III: AU 15 is not present.**

Something else in addition to 12 must be present or you would not be referring to this section, but rather to the description of 12 in this chapter. A likely explanation is that 17 is present in addition to 12, and that the effect of 17 on the shape of the lips and on the skin below the lip corners made you consider the possibility of 15. Now upon further study in Step II, you have ruled out 15. You must verify your scoring of 12+17 or 6+12+17, which can best be done by turning back to 12+17secA and 12+17secC starting on [page 205](#) and to the Subtle Difference table on [page 225](#) to find comparisons between 12 vs. 12+17 and 12+15 vs. 12+17.

You may decide that 17 is not present either (earlier in Step II you ruled out AU 15). Why are you here? How do you explain the appearance change that doesn't look exactly right for 12 alone, and yet which does not meet the criteria to score either 15 or 17? Perhaps the answer is that either AU 20 or 14 has become involved.

AUs 12 and 20 are difficult actions to score together, unless you see their action sequentially. The horizontal stretch is typically either strong enough to overwhelm the oblique pull of 12 or so weak in relation to 12 that it is hard to detect. But there are occasions where signs of both may be evident even though they do not occur sequentially. See the entry for 12 vs. 20 vs. 12+20 in the Subtle Difference table beginning on [page 225](#) for suggestions.

The scoring of AU 12+14 is also difficult. The tightened lip corners due to 14 are usually concealed by the strong oblique pull of 12, but this case may be one of those occasions when evidence of 14 persists. If the 12 is not strong, review the criteria for scoring 14 and see the entry for 12 vs. 12+14 in the Subtle Difference table beginning on [page 225](#) to determine if 14 is responsible for the appearance of the lips.

Another possibility to account for the appearance change which departs from the appearance of 12 alone but which does not match the criteria for 15 or 17 would be that 9 or 10 are also present, and they are, in combination with 12, influencing the shape of the lips. Study the criteria for 9 on [page 94](#) and 10 on [page 96](#) to see whether they should be scored.

At the end of Step III, you should have determined whether AU 17 is present or not. If 17 is present, score the intensity of 12 based on the guidelines for 12 in 12+17 combination, repeated below. If 17 is not present, use the intensity criteria for 12 alone, repeated below. Go to Step VII if you have scored AU 6 to find guidelines for scoring its intensity. You should have accounted for the additional appearance changes beyond those of 12 that brought you to this section in terms of scores that match criteria for such actions as 9, 10, 14, and 20. If so, you have completed this procedure.

### AU 12A

The appearance changes for AU 12 are sufficiently present to indicate AU 12, but are insufficient to score 12B (e.g., a *trace* of raising of skin in the lower/middle nasolabial furrow area and a *trace* of lip corners elongated and angled up). You should emphasize detecting the oblique upward movement of the lip corners in low intensity 12s that changes the angle of the lip corners. Note that neither AU 6 or 11 changes the angle of the lips, as does 12.

### AU 12B

1. Skin in the area of the lower-middle portion of the nasolabial furrow or the furrow itself has been raised up and laterally *slightly*. If the nasolabial furrow is permanently etched, it usually deepens with a 12B, but the crucial change is that the skin in this area shifts obliquely. If the nasolabial furrow is not permanently etched, it may not appear with 12B.  
and
2. *Slight* evidence that infraorbital triangle has been raised; most likely showing in lifting and puffing out of lateral top corner of infraorbital triangle.  
and
3. *Slight* evidence that lip corners elongated and angled up. If upward angle is permanent, it must increase *slightly*.

Note that when 6 is added to 12B there often is more evidence of the nasolabial furrow deepening than in 12B without 6, and the excursion of the lip corners is small in comparison to the extent of crow's feet wrinkles.

Note that appearance changes 1 and 2, as expressed in words, could be due to AU 6, rather than AU 12. However, the appearance of 6 is noticeably different from 12, seen in the images for these AUs. Furthermore, the appearance of 6 and 6+12 also differ. If there are other signs of AU 6, inspect carefully for change 3 to score AU 12.

### AU 12C

All three criteria for 12B above are present and all are at least *marked*, but the evidence is less than the criteria for 12D.

**AU 12D**

Appearance changes 1 (lip corners raised obliquely to make U shape), 2 (deepened nasolabial furrow and oblique movement of skin in that area), and 4 in 12secA are all at least *severe*, but the evidence is less than the criteria for 12E.

**AU 12E**

Appearance changes 1 (lip corners raised obliquely to make U shape), 2 (deepened nasolabial furrow and oblique movement of skin in that area), and 4 (infraorbital triangle raise, infraorbital furrow deepening, in 12secA must be *extreme to maximum*.

**AU 12A in AU Combination 12A+17**

The appearance changes for AU 12 are sufficiently present to indicate AU 12, but are insufficient to score AU 12B in combination 12+17 (e.g., a *trace* of raising of skin in the lower/middle nasolabial furrow area, a *trace* of infraorbital triangle raise, and a *trace* of counteracting the downward angle of the lip corners due to 17 by 12 pulling them up). You should emphasize detecting the oblique upward movement of the lip corners in low intensity 12s that changes the angle of the lip corners from what 17 does alone. Note that neither AU 6 or 11 changes the angle of the lips, as does 12.

**AU 12B in AU Combination 12B+17**

1. Skin in the areas of the lower-middle portion of the nasolabial furrow or the furrow itself has been raised up and laterally *slightly*. If the nasolabial furrow is permanently etched, it usually deepens with a 12B, but the crucial change is that the skin in this area has shifted obliquely. If the nasolabial furrow is not permanently etched, it may not appear with 12B.  
and
2. *Slight* evidence that the infraorbital triangle has been raised; most likely showing in lifting and puffing out of lateral top corner of infraorbital triangle.  
and
3. *Slight* evidence that the downward angle of the lip corners due to 17 has been counteracted by the upward pull of 12. The angle of the lip corners may not be as upwards as it would be from 12 without 17.

Note that appearance change 1 and 2, as expressed in words, could be due to AU 6, rather than AU 12. However, the appearance of 6 is noticeably different from 12, seen in the images for these AUs. Furthermore, the appearance of 6 and 6+12 also differ. If there are other signs of AU 6, inspect carefully for change 3 above to score AU 12.

**AU 12C in AU Combination 12C+17**

All three criteria for 12B above are present and all are at least *marked*, but the evidence is less than the criteria for 12D in 12+17.

**AU 12D in AU Combination 12D+17**

All three criteria for 12B above are present and all are at least *severe*, but the evidence is less than the criteria for 12E in 12+17.

**AU 12E in AU Combination 12E+17**

All three criteria for 12B above are present and all are at *extreme to maximum*.



**STEP IV: (for 15A, 15B or 15A+17, 15B+17 only) Is AU 6, 11 or 12 also present?**

You have noticed that in addition to the downward pull on the lip corners (AU 15) there is some upward action as well – involving the skin around the upper lip, or lip corners, some movement in the infraorbital triangle, and perhaps some deepening of the nasolabial furrow (and you have ruled out the possibility that these changes are due just to AUs 9, 10 or 14). (If you had not seen any of these changes, you would be simply scoring the facial changes as 15, 15+17, or as a more simply scored combination of other AUs and AU 15 or 15+17.) In this step, you decide what actions are causing the apparent upward pull on the lip consistent with the lower intensities of 15.

The problem is complicated because of the following:

- You cannot rely upon the most obvious sign of 12, lip corners pulled obliquely up, because 15 pulls them down. Instead attend to the skin beyond the lip corners and note whether that skin is pulled obliquely; and whether the skin in the area of the lower middle portion of the nasolabial furrow or the furrow itself is pulled obliquely as evidence of AU 12.
- It may be hard to determine whether the change is due to AU 6 or AU 12 since they share the raising of the infraorbital triangle. Look carefully for whether the skin near the top of the infraorbital triangle is pulled towards the eye, which should occur with 6 or 6+12. Remember, that when scoring 6 and 12 together, the scoring criteria for 6 are slightly different than for 6 without scoring 12. The details of these guidelines for 6 with 12 are in the description of the 6+12 combination on [page 188](#). These differences are summarized in Chart 6-1 below and in the intensity scoring of Step VII.
- It may be hard to determine whether it is 11 or 12, especially if the 12 is weak. If it is 11 rather than 12, it is the portion of the upper lip between philtrum and lip corners which is raised, rather than skin beyond the lip corners being pulled obliquely, which is a sign of 12. See the entry for 11 vs. 12 in the Subtle Differences table on [page 225](#).
- It may be hard to determine whether it is 6 or 11. Again, more is required to score 6 than 11, and you may first decide whether the 6 criteria are met, to help you make your decision. See the entry for 6 vs. 11 in the Subtle Differences table on [page 225](#).
- The appearance changes you observe may be due to AU 13 rather than 12, and it is difficult to distinguish 13+15 from 12+15 (with or without 6 and/or 17). See the entry for 12 vs. 13 in the Subtle Differences table on [page 225](#).

The possible scores include the following (disregarding many, more complex, combinations):

- 15A, 15B or
- 15A+17, 15B+17 -- you decide that the changes do not meet criteria for adding 6, 11, or 12.
- 6+15A, 6+15B, 6+15A+17, or 6+15B+17
- 6+11+15A, 6+11+15B, 6+11+15A+17, or 6+11+15B+17
- 6+12+15A, 6+12+15B, 6+12+15A+17, or 6+12+15B+17
- 12+15A, 12+15B, 12+15A+17, or 12+15B+17
- 11+15A, 11+15B, 11+15A+17, or 11+15B+17

Chart 6-1 below lists the criteria for scoring 6, 11, and 12 at the B level of intensity in some of these combinations for convenience in determining the presence of these AUs. Note that these criteria can change depending upon the combination you are considering. The table also summarizes warnings about co-occurrence.

**Chart 6-1: Criteria for the B Intensity Level of AUs Involved in Step IV**

Basic Criteria for the B Intensity Level	Possible Outcomes of Step IV			
	12+15A/B or 12+15A/B+17	6+12+15A/B or 6+12+15A/B+17	11+15A/B or 11+15A/B+17	6+15A/B or 6+15A/B+17
<b>AU 6B:</b> a) crow's feet wrinkles b) infraorbital triangle raise; cheeks raise; infraorbital furrow deepened; bagging or wrinkling below eye c) additional evidence of AU 6 constriction	Evidence is insufficient to meet the criteria for scoring 6B in the presence of 12:  both a <u>not</u> at least <i>marked</i> and b and c are <u>not</u> at least <i>slight</i> .  You may decide that there is enough evidence to score 6A.	To score 6B, both a is at least <i>marked</i> and b and c are at least <i>slight</i> . You must distinguish between 11 and 6, 11 and 12. AU 11 does not produce many of the appearances of 6 described in entry for 6 vs. 11 vs. 6+11 in the Subtle Differences table beginning on <a href="#">page 225</a> .	Evidence is insufficient to meet the criteria for scoring 6B:  (1) a <u>or</u> b is <u>not</u> at least <i>marked</i> OR (2) both a and b are <u>not</u> at least <i>slight</i> .  You may decide that there is enough evidence to score 6A.	Evidence is sufficient for one of the following:  (1) a <u>or</u> b is at least <i>marked</i> OR (2) both a and b are at least <i>slight</i> .
<b>AU 11B:</b> a) oblique lifting of portion of lip midway between philtrum and outer corner b) deepening of only middle portion of nasolabial furrow	AU 11 is hard to detect in the presence of 12; see the comparison for 11 vs. 12 in the Subtle Difference table beginning on <a href="#">page 225</a> . If the signs of 11 are seen, add it and its intensity to the score above using the scoring guidelines on <a href="#">page 177</a> .	AU 11 is hard to detect in the presence of 12, and 6 produces many similar changes; see the comparisons for 6 vs. 11 vs. 6+11 and 11 vs. 12 in the Subtle Differences table beginning on <a href="#">page 225</a> .	Either a or b is at least <i>slight</i> .	AU 11 produces many changes similar to 6, and 6+15 is hard to distinguish from 11+15; see the comparison for 6 vs. 11 in the Subtle Differences table beginning on <a href="#">page 225</a> .
<b>AU 12B:</b> a) oblique pull of skin beyond lip corners b) oblique raise of skin in area of lower middle portion of nasolabial furrow and/or raise of the furrow itself	Both a and b are at least <i>slight</i> ; if there is less evidence of 12, but you are certain it has acted, score 12A; if more evidence than the B level, score C, D, or E under the guidelines of Step VII on <a href="#">page 219</a> .	Both a and b are at least <i>slight</i> ; if there is less evidence of 12, but you are certain it has acted, score 12A; if more evidence than the B level, score C, D, or E under the guidelines of Step VII on <a href="#">page 219</a> .	Evidence is insufficient to meet the criteria for scoring 12B:  both a and b are not <i>slight</i> .  You may decide that there is enough evidence to score 12A.	Evidence is insufficient to meet the criteria for scoring 12B:  both a and b are not <i>slight</i> .  You may decide that there is enough evidence to score 12A.

At the end of Step IV, you should have accounted for the appearance changes that you detected in the upper lip and for the upward pulling on the lip corners by scoring such actions as 6, 11, and 12. You are now ready to score the intensities of these AUs. For AUs 6 and 12, go to Step VII to find the intensity scoring criteria. For AU 11 and any other AUs you may have scored, go to the appropriate Section C for that AU.

#### **STEP V: (for 15C, 15D or 15C+17, 15D+17 only) Is AU 6, 11 or 12 also present?**

You follow the same instructions here as in Step IV and use the same criteria for 6, 11, or 12 to determine what action is causing the upward movement of the lip when 15 is at moderate intensities. The only difference is that warnings you must heed are different. The criteria for 6, 11, and 12 have been repeated in Chart 6-2 so that the warnings that apply when 15 is scored C/D can be observed while reviewing the criteria. In addition to the considerations required in Step IV, pay special attention to the descriptions of the possible outcomes of this step for 15C/D, and study the table of the criteria, rules and warnings for the outcomes for 15C/D and 15C/D+17 with 6, 11, and 12.

**Chart 6-2: Criteria for the B Intensity Level of AUs Involved in Step V**

Basic Criteria for the B Intensity Level	Possible Outcomes of Step V			
	12+15C/D or 12+15C/D+17	6+12+15C/D or 6+12+15C/D+17	11+15C/D or 11+15C/D+17	6+15C/D or 6+15C/D+17
AU 6: a) crow's feet wrinkles b) infraorbital triangle raise; cheeks raise; infraorbital furrow deepened; bagging or wrinkling below eye c) additional evidence of AU 6 constriction	Evidence is insufficient to meet the criteria for scoring 6B in the presence of 12:  both a <u>not</u> at least <i>marked</i> and b and c are <u>not</u> at least <i>slight</i> .  You may decide that there is enough evidence to score 6A.	To score 6B, both a is at least <i>marked</i> and b and c are at least <i>slight</i> . You must distinguish between 11 and 6, 11 and 12. AU 11 does not produce many of the appearances of 6 described in entry for 6 vs. 11 vs. 6+11 in the Subtle Differences table beginning on <a href="#">page 225</a> .	Evidence is insufficient to meet the criteria for scoring 6B: (1) a <u>or</u> b is not at least <i>marked</i> OR (2) both a and b are not at least <i>slight</i> .  You may decide that there is enough evidence to score 6A.	Evidence is sufficient for one of the following: (1) a <u>or</u> b is at least <i>marked</i> OR (2) both a and b are at least <i>slight</i> .
AU 11: a) oblique lifting of portion of lip midway between philtrum and outer corner b) deepening of only middle portion of nasolabial furrow	AU 11 is hard to detect in the presence of 12; see the comparison for 11 vs. 12 in the Subtle Difference table beginning on <a href="#">page 225</a> . If the signs of 11 are seen, add it and its intensity to the score above using the scoring guidelines on <a href="#">page 177</a> .	AU 11 is hard to detect in the presence of 12, and 6 produces many similar changes; see the comparisons for 6 vs. 11 vs. 6+11 and 11 vs. 12 in the Subtle Differences table beginning on <a href="#">page 225</a> .	Either a or b is at least <i>slight</i> .	AU 11 produces many changes similar to 6, and 6+15 is hard to distinguish from 11+15; see the comparison for 6 vs. 11 in the Subtle Differences table beginning on <a href="#">page 225</a> .
AU 12: a) oblique pull of skin beyond lip corners b) oblique raise of skin in area of lower middle portion of nasolabial furrow and/or raise of the furrow itself	Both a and b are at least <i>slight</i> ; if there is less evidence of 12, but you are certain it has acted, score 12A; if more evidence than the B level, score C, D, or E under the guidelines of Step VII on <a href="#">page 219</a> .	Both a and b are at least <i>slight</i> ; if there is less evidence of 12, but you are certain it has acted, score 12A; if more evidence than the B level, score C, D, or E under the guidelines of Step VII on <a href="#">page 219</a> .	Evidence is insufficient to meet the criteria for scoring 12B: both a and b are not <i>slight</i> .  You may decide that there is enough evidence to score 12A.	Evidence is insufficient to meet the criteria for scoring 12B: both a and b are not <i>slight</i> .  You may decide that there is enough evidence to score 12A.
ADDITIONAL WARNINGS:	If 12 is strong it is unlikely 6 would be absent	A weak 12 is unlikely with 6+15C/D+17.	Consider 6+15+17 if 15 is D or E.	

The following outcomes of Step V are possible:

15C, 15D or  
15C+17, 15D+17

You decide that the appearance changes do not meet the criteria for 11+15 or 11+15+17, let alone 12+15, 6+12+15, 12+15+17 or 6+12+15+17.

6+15C, 6+15D or  
6+15C+17, 6+15D+17

If you make this decision, you should consider carefully the strength of the 15. If 15 is an action which is D or E, then it would be wise to check Step VI which describes the scoring of 15E or 6+15E and 15E+17 or 6+15E+17.

6+12+15C, 6+12+15D or 6+12+15C+17, 6+12+15D+17	<p>Consider the intensity level of 12. Are the appearance changes for 12 listed in Chart 2 just barely apparent, or are they <i>extreme</i> or are they in between:</p> <p>6+12A+15C/D, 6+12B+15C/D or 6+12A+15C/D+17, 6+12B+15C/D+17:</p> <p>This is very unlikely because with a 15C or 15D, it is unlikely you would see a 12A or 12B. When 6 is present, even a weak 12 appears to reach C or D intensity in these combinations.</p> <p>6+12E+15C/D or 6+12E+15C/D+17:</p> <p>Be certain it is not just 6+15E or 6+15E+17. Check carefully that the signs of 12 are actually there and that 15 is C or D and not E. If you think it might be 15E, read Step VI.</p>
12+15C, 12+15D or 12+15C+17, 12+15D+17	<p>Consider the intensity level of 12. Are the appearance changes for 12 listed in Chart 2 just barely apparent, or are they <i>extreme</i> or are they in between:</p> <p>12A+15C/D, 12B+15C/D or 12A+15C/D+17, 12B+15C/D+17:</p> <p>Although it may be difficult to see 12A or B in these combinations, these scorings are more likely than 6+12A/B+15C/D or 6+12A/B+15C/D+17.</p> <p>12C+15C/D, 12D+15C/D or 12C+15C/D+17, 12D+15C/D+17:</p> <p>These combinations are unlikely, since in order to see this much evidence of 12 in addition to 15, it is likely that the signs of 6 would also be present.</p> <p>12E+15C/D or 12E+15C/D+17:</p> <p>Unlikely, as you would probably also have evidence for 6 as well.</p>
11+15C/D or 11+15C/D+17:	<p>You have decided that the appearance changes do not present sufficient evidence to score either AU 6 or AU 12, yet there are appearance changes in the infraorbital triangle not due to AU 9 or 10 that are sufficient evidence for scoring 11.</p>

#### STEP VI: (for 15E only) Is AU 6, AU 11 or AU 12 also present?

AU 15E is such a strong action and so dominates appearances in these combinations that it is very difficult to distinguish 6+15E from 6+12+15E or 6+15E+17 from 6+12+15E+17, especially when the action of 12 is weaker in respect to 15E or you cannot see the movement of each AU independently. There are subtle differences, but the distinctions are so difficult that you have to be very careful about detecting the signs of 12, unless you can observe 12 appear on or go off the face independently of the action of 6 or 15. These same cautions apply to scoring 12 (with or without 6) in addition to 15E+17. In these situations, it is very important that you make the correct distinctions, to score 12 if it is present or to omit scoring it if there is inadequate evidence of its presence. The signs of 12 in the presence of a strong 15 are seen in several places. The boundary of the red part of the upper lip is pulled obliquely up by 12 changing the curvature of the red part and revealing more of the red part than with only 15. This appearance change also occurs, in part, when a strong 6 is also present. Also, look at the direction of skin movement beyond and just above the lip corners, which is stretched obliquely up by 12. This stretching deepens the lower portion of the nasolabial furrow, may change the shape of the curve of this furrow, and may cause some vertical wrinkling beyond the lip corners in the area of the lower nasolabial furrow. When 15E is present (with or without 17), it is very difficult to detect a weak or moderate 12, and even the strongest 12 produces few signs, except when 6 is also evident on the face. AU 6 is detectable from crow's feet wrinkles, narrowing of the eye aperture due to gathering and bagging of skin in the eyelid, and lowering of the outer corner of the eyebrow. In addition to considering 12+15E or 6+12+15E or 6+12+15E+17, also consider 11, as in 11+15E+17, to account for changes, or possibly 13.

#### Step VII: Score the Intensity of AUs 6, 11, and 12

On completing Step III, IV, V, or VI, you score the intensity of 6, 11, 12, and other AUs you detected. The intensity scoring for 6 and 12 in the combinations considered in this section is somewhat different from scoring these actions with other AUs. To score the intensity of AU 11, follow the guidelines for 11 alone on [page 177](#). The intensity criteria for 6B presented below differ slightly depending on the intensity of 15.

**AU 6A in 6A+12, 6A+12+15, 6A+12+15+17, 6A+15, 6A+15+17, 6A+12+17 (also 6A+9+12)**

The appearance changes for AU 6 are sufficiently present to indicate AU 6, but are insufficient to score 6B in the combinations listed above (e.g., *slight* crow's feet or *slight* cheek raise).

**AU 6B in 6B+12, 6B+12+15, 6B+12+15+17, 6B+15, 6B+15+17, 6B+12+17 (also 6B+9+12)**

1. Crow's feet wrinkles.  
and,
2. Infraorbital triangle raise: cheek raise, infraorbital furrow deepening, bags or wrinkles under the eye.  
and
3. Additional evidence of the constricting effect of AU 6 around the eye aperture that is not produced by AU 12, such as: wrinkling, lowering, or changing shape of the eye cover fold; lowering of the outer corner of the eyebrow, crow's feet wrinkles above the outer corner of the eye lateral to the eyebrow, or movement above the cheekbone that shows bulging in the outer ring of muscle around the eye.

For combinations 6+15, 6+15+17, etc. (i.e., 6 with 15 or 15+17, not 12), criterion 1 or 2 is *marked*, or criteria 1 and 2 are both *slight*.

In all other combinations (i.e., 6 in any combination with 12), criteria 1 is *marked* and criterion 2 and 3 are *slight*, but the evidence is less than the criteria for 6C.

**AU 6C in 6C+12, 6C+12+15, 6C+12+15+17, 6C+15, 6C+15+17, 6C+12+17 (also 6C+9+12)**

The three criteria listed under 6B are all present and at least *marked*, but the evidence is less than the criteria for 6D.

**AU 6D in 6D+12, 6D+12+15, 6D+12+15+17, 6D+15, 6D+15+17, 6D+12+17 (also 6D+9+12)**

The three criteria listed under 6B are all present and at least *severe*, but the evidence is less than the criteria for 6E.

**AU 6E in 6E+12, 6E+12+15, 6E+12+15+17, 6E+15, 6E+15+17, 6E+12+17 (also 6E+9+12)**

The three criteria listed under 6B are all present and are at least *extreme*, with the infraorbital triangle and cheek raising criterion in the *maximum* range.

**AU 12A in 6+12A, 6A+12+15, 6A+12+15+17, 6A+12+17, 12+15+17**

The appearance changes for AU 12 are sufficiently present to indicate AU 12, but are insufficient to score 12B in the combinations listed above (e.g., *slight* upward oblique pull at the lip corners and a *trace* of nasolabial furrow raise).

**AU 12B in 6+12B, 6+12B+15, 6+12B+15+17, 6B+12+17**

1. *Slight* upward oblique pull of skin beyond lip corners  
and
2. *Slight* oblique raise of skin in area of lower middle portion of nasolabial furrow and/or raise of the furrow itself.

**AU 12C in 6+12C, 6+12C+15, 6+12C+15+17, 6+12C+17 (also 6C+9+12)**

The two criteria listed under 12B are present and at least *marked*, but the evidence is less than the criteria for 6E.

**AU 12D in 6D+12, 6D+12+15, 6D+12+15+17, 6D+12+17 (also 6D+9+12)**

The two criteria listed under 12B are present and at least *severe*, but the evidence is less than the criteria for 6E.

**AU 12E in 6E+12, 6E+12+15, 6E+12+15+17, 6E+12+17 (also E+9+12)**

All three criteria listed for 6B above are *extreme* to *maximum*.