
Action Unit Combinations - 12+26, 12+27

A. Appearance Changes due to 12+26, 12+27

The elements described separately for 12 and 26 are combined additively, but in 12+27 the appearance associated with 27 is changed to a small extent. Combinations of AU 12 with 26 or 27 are virtually always going to be scored with a 25, e.g., 12+25+26 and 12+25+27 because the lips are almost always going to part.

AU 12

1. Pulls the corners of the lips back and upward obliquely.
2. Deepens the nasolabial furrow, pulling it laterally and up. The skin adjacent to the nasolabial furrow is raised up and laterally.
3. In a weak to moderate 12, there is some raising of the infraorbital triangle and there may be some deepening of the infraorbital furrow.
4. In a strong action of 12, one or more of the following:
 - a. The infraorbital triangle push upwards is more evident.
 - b. The infraorbital furrow deepening is more evident.
 - c. Bags the skin below the lower eyelid.
 - d. Narrows the eye aperture by pushing up the cheek and skin below the lower lid.
 - e. Produces crow's feet at the eye corners.
 - f. May raise and widen the nostrils.
5. As with 12 alone, in 12+26 or 12+27 if the action of 12 is weak to moderate, then appearance changes listed under 4 above do not occur because of 12, but they can happen because of the action of AU 6. When the action of 12 is weak to moderate, you can more easily score the presence of 6 with 12+26 or 12+27 because the evidence of AU 6 is not masked by 12. When the action of 12 is strong, most of the appearance changes listed under 4 are evident with or without 6, and it is difficult to determine if they are due to 12 alone or to the addition of AU 6. When 12 is strong, you need to carefully distinguish the presence of 6, in a 6+12+26 or 6+12+27.

AU 26

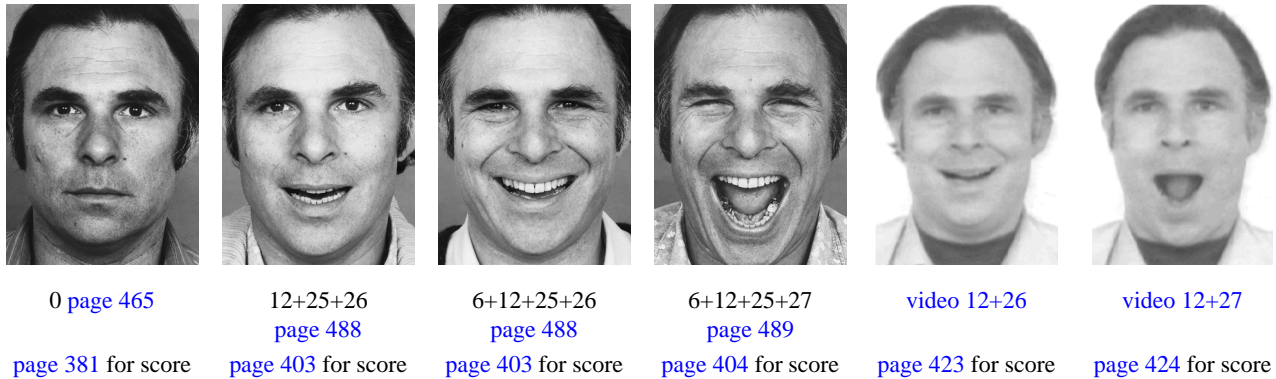
6. Jaw dropped open.
7. Space between teeth is evident or can be inferred.

AU 27

8. Jaw pulled open.
9. Space between teeth can become *maximum*.

If you are considering scoring AU 16 in these combinations, review the Reference for AU 16 on [page 115](#).

Inspect the video of 12+25+26 and 12+25+27 and images 12+25+26, which shows 12 at low intensity, and 6+12+25+26 and 6+12+25+27, which show 12 at higher intensity.



B. How to do 12+26 and 12+27

Follow the instructions given for each Action Unit, repeated below. Try both high and low level actions of 12 with 26 and 27.

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 26 (repeated from [page 104](#)): To perform AU 26, relax your mouth and let your jaw fall open; do not pull or force your jaw open, just relax the muscle that clamps your teeth together and let your jaw fall open so that your teeth are separated. You have made AU 26. If you are doing this correctly, there is no muscular tension in your lips, and no stretching of your lips. Once your jaw closing muscle is relaxed enough to permit the jaw to drop wide enough, your lips should part, scored 25+26. It is easier to detect a 26 if the lips part than if they remain closed. How soon the lips part with a drop of the jaw varies in different people, and as indicated above, some people need no jaw drop to part their lips. Examine whether your jaw needs to drop in order to part your lips, and if so, how far it must drop. Notice also how far you can drop your jaw merely by relaxing, not pulling it open. You should find that this jaw drop is limited; beyond this limited extent, AU 27 is scored because a muscle must act to pull the jaw open further. Most people can drop their jaw with AU 26 so that the tongue or index finger can fit between the teeth, but not much more, when their head is in a normal upright position. Notice what happens at the corners of your lips as the mouth and lips move from being closed, to the relaxed drop of the jaw of AU 26, and beyond as you pull your mouth open. Relax your jaw to perform an AU 26, then nod your head up and down – the relaxed jaw drop is greater when the head is back than when it is forward.

AU 27 (repeated from [page 104](#)): To perform AU 27, pull your jaw down, far down, opening your mouth wide open as if a physician were going to examine your tonsils. You have made a large AU 27, scored 25+27 because of the lip parting. Note that while you have not tensed your lip muscles, they are stretched somewhat by the extent of opening of your mouth. The shape of your mouth opening is also stretched in the vertical direction. Notice what happens to the position of the red parts of the lips relative to the teeth when the jaw is dropped, keeping the lips relaxed, i.e., no other actions moving the lips. You should see that the center part of the upper lip does not change its position relative to the upper teeth, but the lateral parts near the corners are pulled down relative to the upper teeth as the mouth is stretched open. The center and corners of the lower lip, on the other hand, move higher relative to the lower teeth as you stretch your jaw down, which tends to pull the teeth down more than the lower lip. You need to be familiar with the effect of jaw dropping and stretching alone on the position of the lips relative to the teeth in order to score the intensity of AU 25 with 27. Can you cover your mouth opening with your lips when the stretching open of the jaw is maximum? Try to perform the minimum AU 27 starting with your teeth together, then rapidly pull or snap your jaw down to open your mouth about as much as you were able to relax it open when performing AU 26. If you need some motivation to help you do this movement, imagine you were trying to yell “Hey!” to someone as a warning. Look in the mirror to see how the time course of this rapid, jerky jaw movement differs from that of the much slower relaxed opening of AU 26, which results in much the same appearance at its end

point. This quality of movement is what you must use to distinguish an AU 26 from an AU 27 when the jaw drop is no more than the maximum that can be produced by merely relaxing the jaw closing muscle. A jaw drop beyond the maximum that can be produced by relaxing (space between the teeth about that which permits the tongue or index finger to fit) must be scored an AU 27, regardless of the rapidity of the movement.

C. Intensity Scoring for AU 12 in 12+26, 12+27

The intensity criteria for AUs 12, 26, and 27 are the same in combinations 12+26 and 12+27 as for these AUs alone. However, stronger actions of AU 27 make detection of the lower intensities of AU 12 quite difficult, even when you see the movement, but it is important to distinguish 12+27 from 27 alone. Look for upward movement of the lip corners and raising of the infraorbital triangle as evidence of 12 with a strong 27.

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 26A

The intensity scoring for AU 26 reflects the difference between the teeth being together versus the most the jaw can be lowered merely by relaxing the muscle that closes the jaw (not the degree to which the jaw can be stretched open, which is a greater absolute opening).

In 26A, the appearance changes for AU 26 are sufficiently present to indicate AU 26, but are insufficient to score 26B (e.g., you see the jaw drop *slightly* by relaxation).

AU 26B

1. *Marked* and unambiguous dropping of the mandible by relaxation. If you score 26B or greater without a 25 (i.e., the lips do not part), look carefully for signs of AU 17 and/or 24.
If you do not see the movement:
2. You must see space between at least some of the upper and lower teeth, or a space between the teeth must be unambiguously inferred from the lips, a finger, or other object held between the teeth.

AU 26C

The lowering of the jaw by relaxation is about midway between teeth together and as far as the jaw can drop from relaxation of the muscle that closes the jaw, i.e., the lowering is in at least the *pronounced* range, but the evidence is less than the criteria for 26D. In 26C, if the lip parting permits, you can see space between all of the upper and lower teeth. For scores of 26C and above, you generally scoring 25 as well, unless there is some other action uniting the lips and causing them to remain closed.

AU 26D

The lowering of the jaw by relaxation is at least *severe*, about as much as the tongue can stick through, but the evidence is less than the criteria for 26E.

AU 26E

The lowering of the jaw by relaxation is in the *maximum* range, and is a gap of not much more than one finger.

AU 27A

Score 27A when you see the jaw actively pulled down, but the jaw is lowered no more than about what a 26E might do. You must see the jaw jerked or pulled rapidly downward in distinction to the slower opening of relaxation in 26. If in doubt between 26 and 27, score 26 when the jaw lowering is no more than a *trace* different from that which might be caused by AU 26E. 27A is not a proper score for a still picture because you cannot detect the required active pulling.

AU 27B

1. Jaw lowering is at least *slightly* more than might be produced merely by relaxing the jaw closing muscle, e.g., *slightly* more than needed to stick your index finger between the teeth, regardless of whether you see a rapid pulling or not.
and
2. Lip stretching by the downward pull on the jaw is clearly evident at least in the corners of the lips which begin to lose their angular form and start to become rounder from the stretching. This lip stretching must be *marked* at least.

AU 27C

The jaw lowering is *markedly* more than might be produced by relaxation alone, and the stretching of the lips is *pronounced* at least, but the evidence is less than the criteria for 27D.

AU 27D

The jaw lowering is *severely* more than might be produced by relaxation alone, and the stretching of the lips is *severe* at least, but the evidence is less than the criteria for 27E.

AU 27E

The jaw lowering that separates the teeth and the stretching of the lips is in the *maximum* range. .