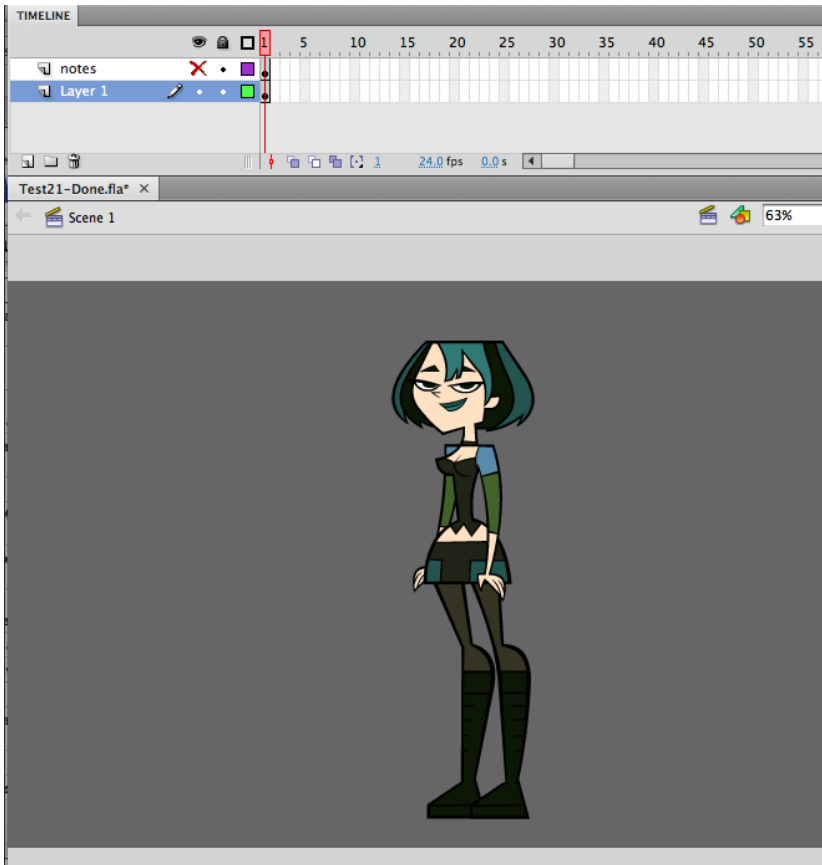


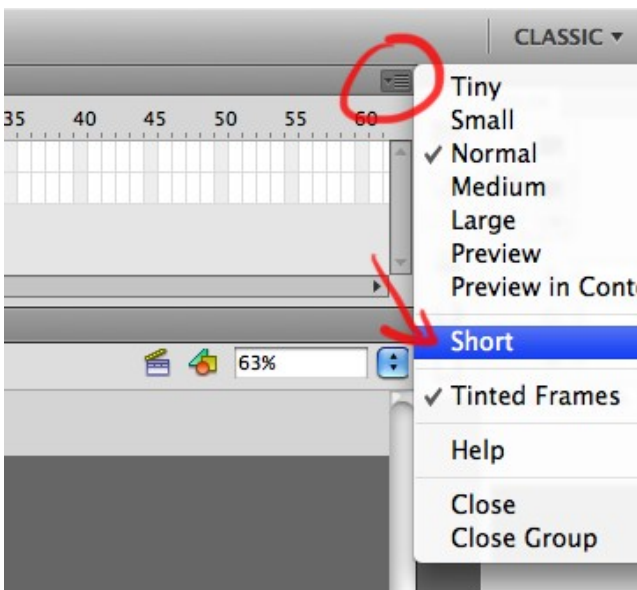
Walk Cycle with Symbols

STEP 1

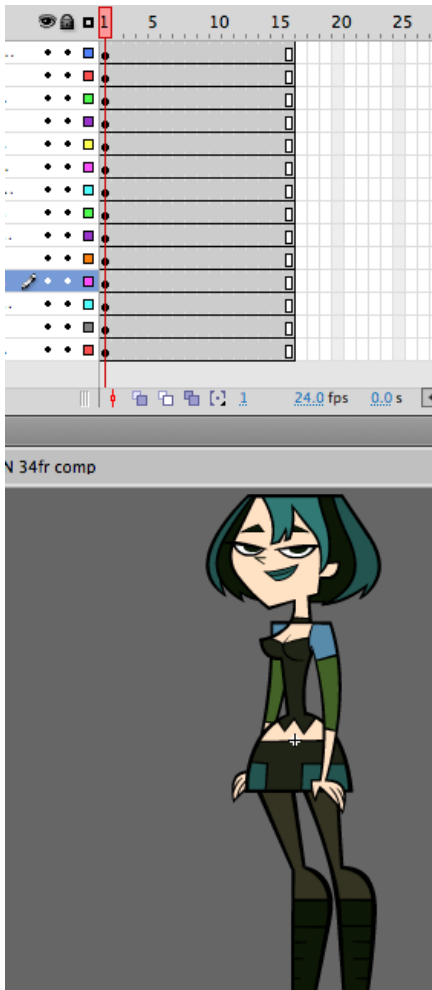
Assuming you have your character all rigged and ready to go, double click on the character to get into the master symbol to see all the layers that make up all of the character's body parts.



Go up to the small menu tab in the top right corner and set it to 'Short'. This will make viewing of the layers a bit easier to manage.

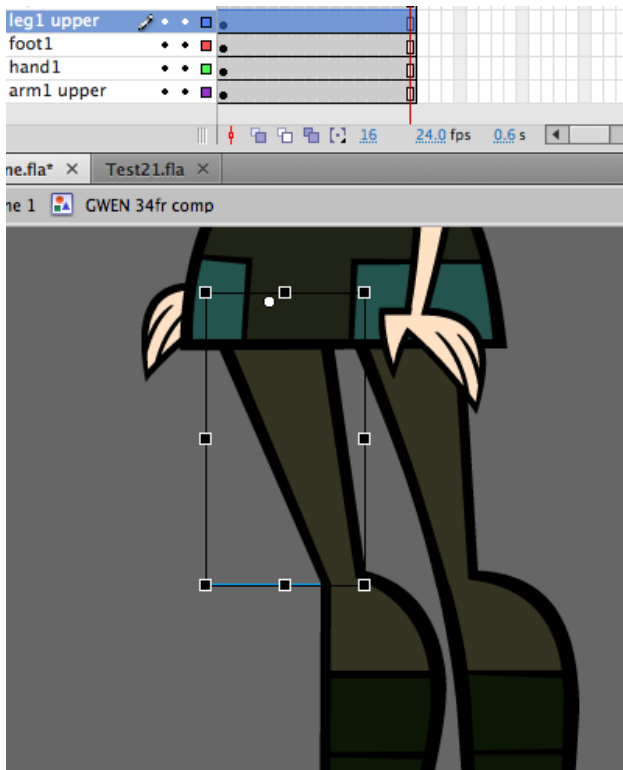


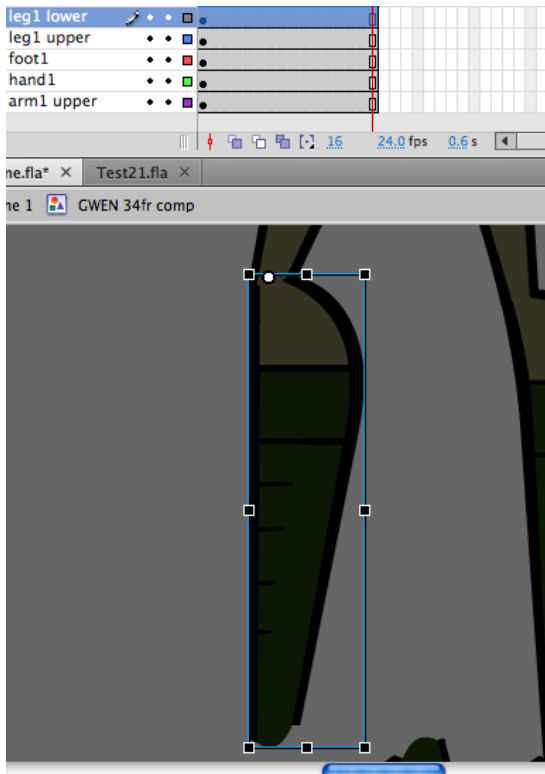
Try to setup your stage and timeline so that you can see as much of the full character and all the layers as possible.



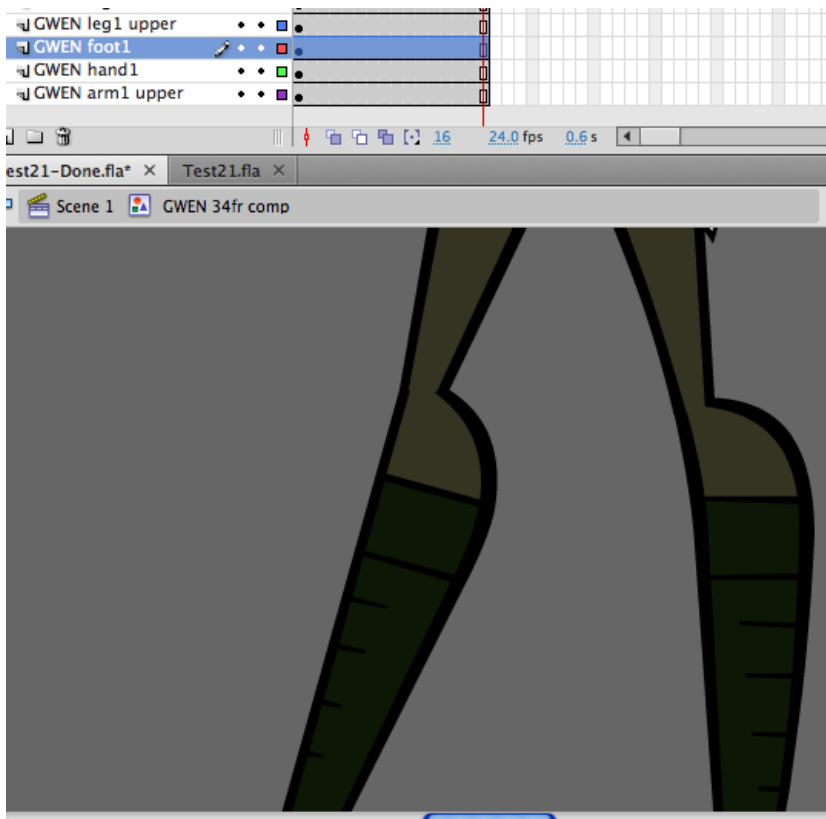
STEP 2

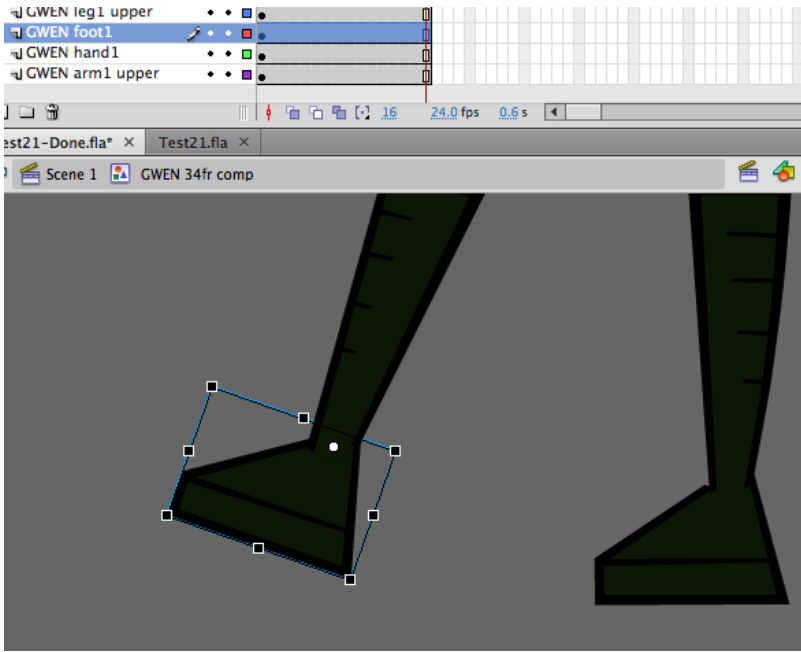
Begin to pose your character in the preliminary 'full stride' positions. With the arrow tool, click on the and front (screen left) thigh, hit **Q** to click and drag from the lower corner to rotate.





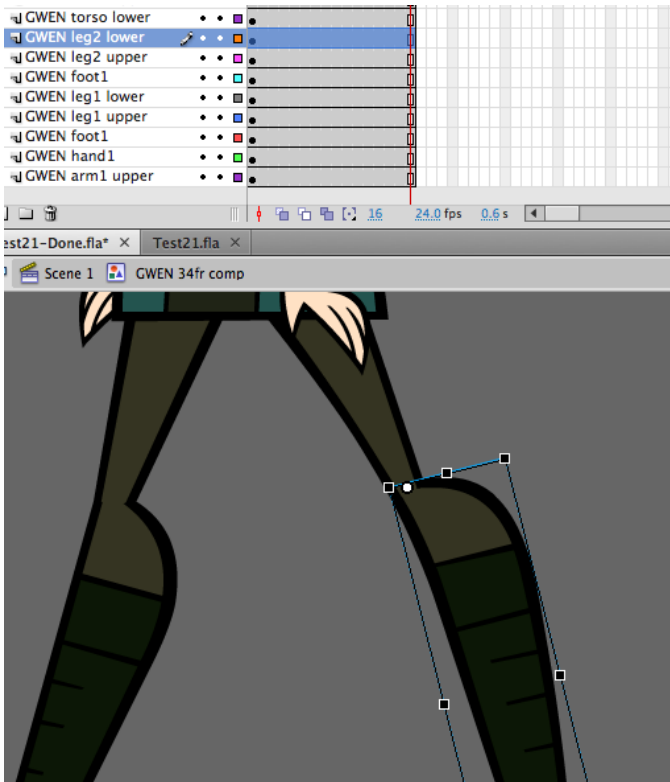
Definitely have one hand on the keyboard, you'll be using the space bar to move your camera around and alternating between **Q** and **V** to quickly switch between your Move tool and your Rotation Tool. Rotate the lower leg and foot to assume the position of your first key pose for the walk.





Repeat this for her other leg and foot.

You might have to shift the front facing leg/foot upwards and the back leg/foot downwards to make the pose look more natural.



STEP 3

Now for the arms.

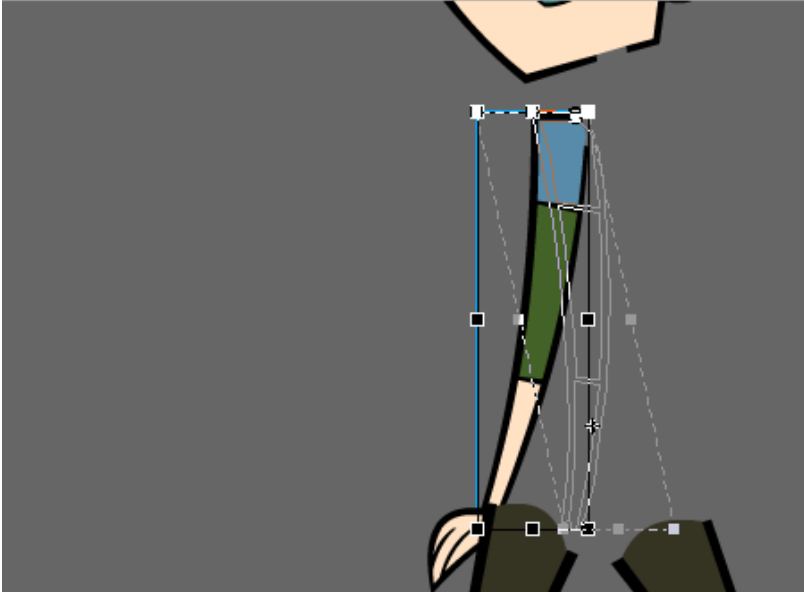


GWEN head comp	• • •	•
GWEN neck	✗ • •	•
GWEN hand2	✗ ✗ •	•
GWEN arm2 upper	✗ ✗ •	•
GWEN hair UL	✗ • •	•
GWEN torso chest	✗ ✗ •	•
GWEN torso upper	✗ ✗ •	•
GWEN torso lower	✗ • •	•
GWEN leg2 lower	• • •	•
GWEN leg2 upper	• • •	•
GWEN foot1	• • •	•
GWEN leg1 lower	• • •	•
GWEN leg1 upper	• • •	•
GWEN foot1	• • •	•
GWEN hand1	• • •	•
GWEN arm1 upper	• • •	•

16 24.0 fps 0.6 s

Test21-Done.fla × Test21.fla ×

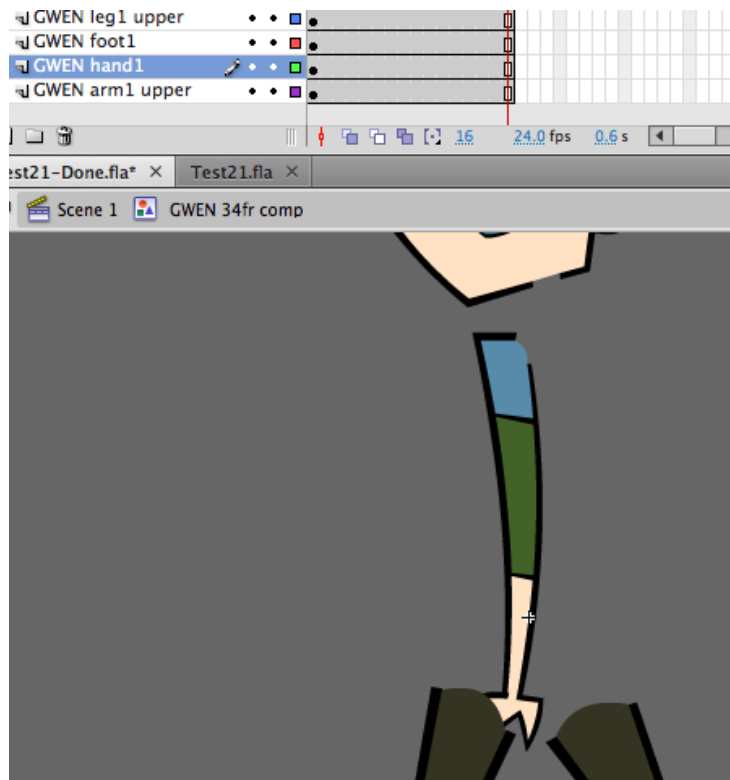
Scene 1 GWEN 34fr comp



Select the foreground arm (screen right), hit **Q** and skew (do **not** rotate) the arm forward by dragging it from the wrist (between the black nodes).

Then click and drag the hand to reconnect with the wrist.

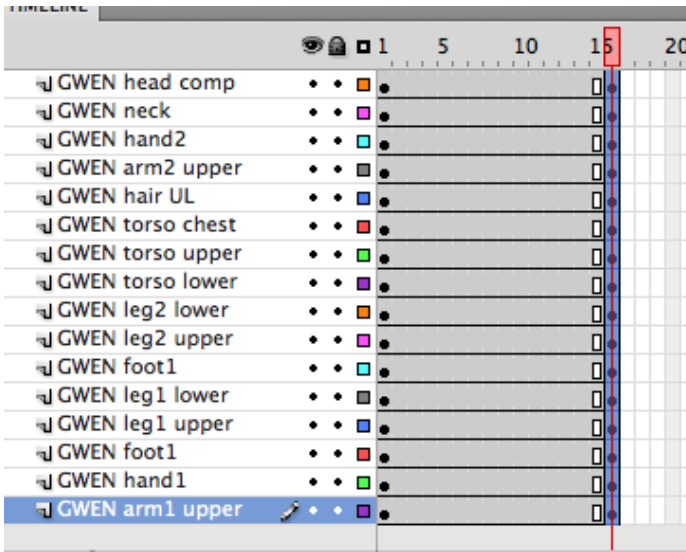
Do this again with the background arm, this time skewing it back, and reconnect the hand. You might need to make the torso temporarily invisible to reposition it clearly.



So our first pose is done.

STEP 3

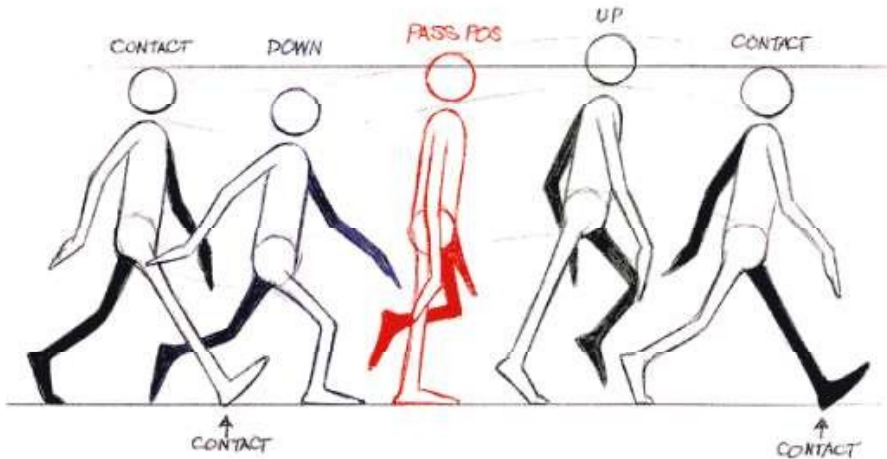
Now select all the keys on the first frame, make sure you grab all the frames on all the layers, then hold down **ALT** while you click and drag all the keys and place them on to **FRAME 17**. This duplicates the pose on to a new 17th frame, you'll be deleting this last frame later, for now it's there for reference.



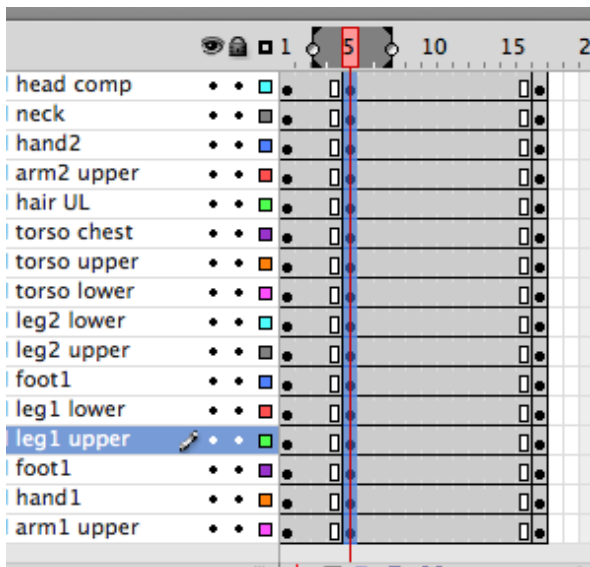
Turn on your onion skin.

Now to create the first passing position'.

Remember:



Our character's design style and anatomy doesn't allow for much recoil or high points. CONTACTS poses and PASSING POSITION poses are all we'll do for this one.



So go to frame 5, select all of the frame 5 layers. Hit F6 to keyframe it.

First thing, raise up the arms, head and torso to create the pose.

With the Selection Tool (V), click and drag to select the top half of the character, make sure to grab her hands too but not her legs (hold down SHIFT to add or remove a selection by clicking on body parts).

Only shift up the parts a bit, at 100% zoom you only need to lift up these body parts by 5-8 clicks of the UP arrow key on the keyboard.

STEP 4

Ctrl+S

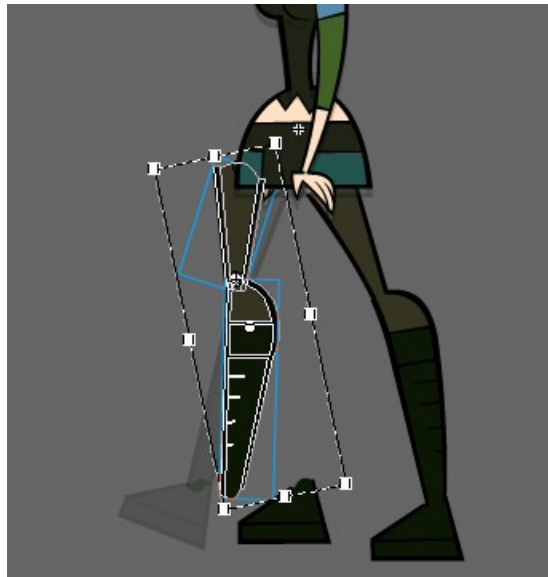
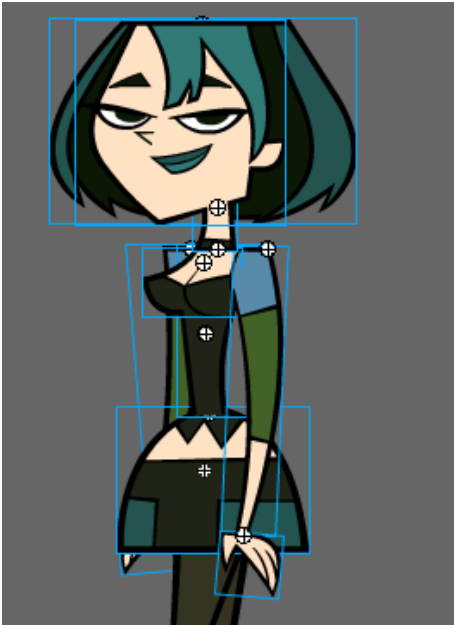
To save your work!

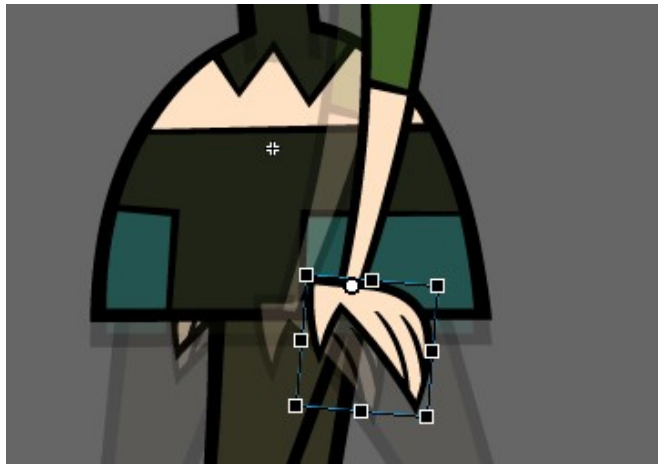
Now Activate your onion skin, just to keep a reference pose in view. Click on the front (screen left) foot. Rotate it so it's flat and move it underneath her pelvis. Keep in mind the feet will have to tween in that flat straight line.

Rotate the leg too, you might have to shift it around a bit since her body is rising and you need to prevent the joints from separating.

Reposition the other leg and foot to cross over the other leg. You'll have to rotate and shift the pieces around individually.

Do the same for the arms, skew (don't rotate) the arms. Rotate the hands inwards slightly.





STEP 5

Now to create the other 'full stride pose'.

Got to frame 9, select all of the frame 9 layers. Hit F6 to keyframe it.

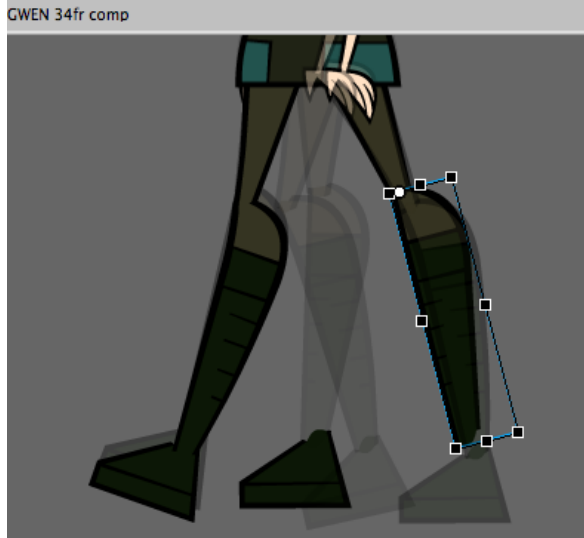
Stretch out your onion skin so you can see the last frame as reference for the leg positions. Similar to frame 1 and 17, but this time it's the opposite legs in those positions. Select and rotate the legs and feet and grab the torso, arms and hands and lower them back to the original position.

Ctrl+S

To save your work!

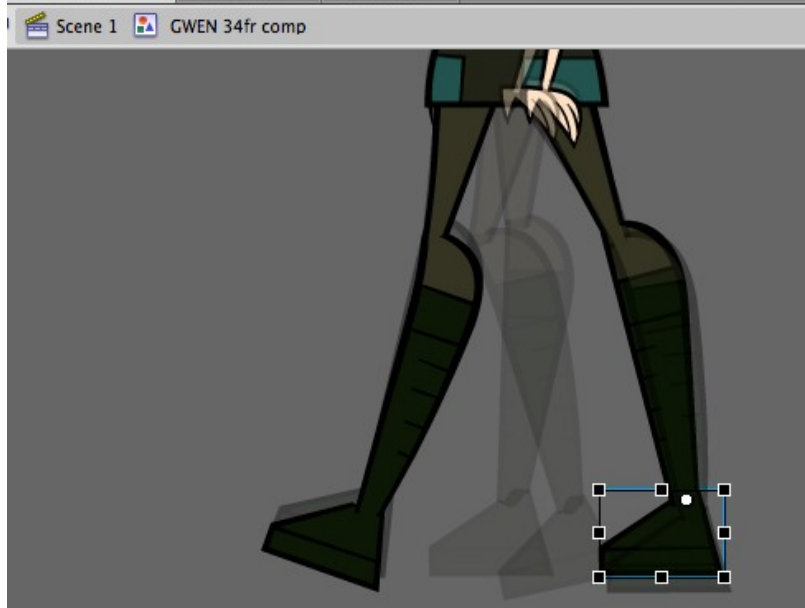
Timeline view showing multiple layers (ip, ver, st, ver, er, er, er, er, er, er) with a red playhead at frame 10. The timeline axis is marked from 1 to 35.

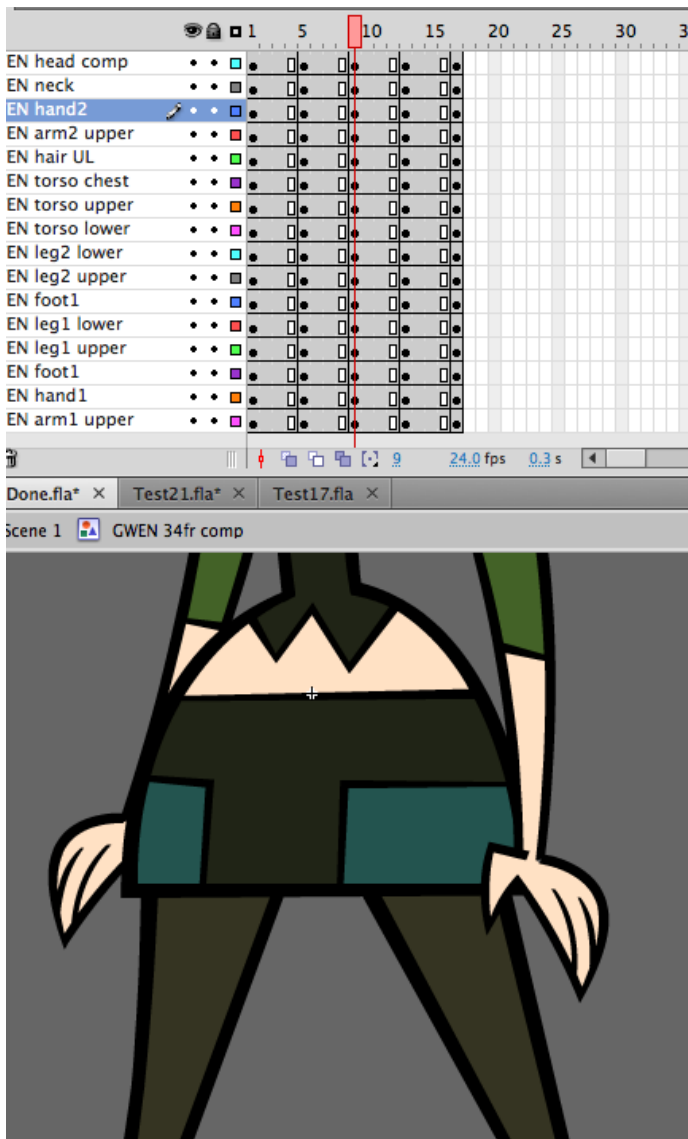
Test21 fla* x Test17 fla x



Timeline view showing a zoomed-in view of the 'GWEN foot1' layer. Other layers visible include GWEN leg1 lower, GWEN leg1 upper, GWEN hand1, and GWEN arm1 upper. The red playhead is at frame 10.

Test21-Done fla* x Test21 fla* x Test17 fla x





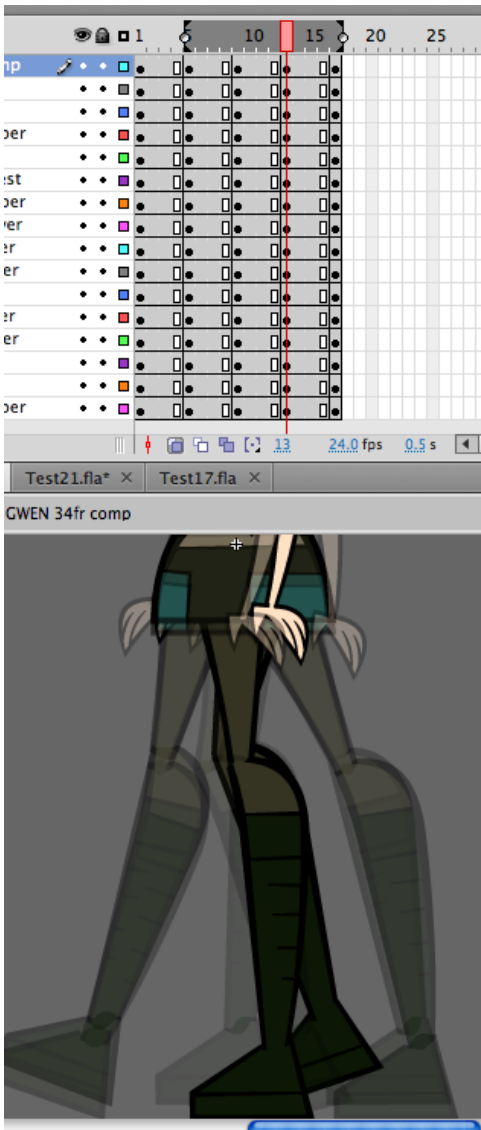
Remember that the layers named “leg1” are naturally higher up because they are technically attached to the character’s right hip, and compositing wise are behind the front leg (leg2).

Skew the arms apart with a bit more rotation in the hands.

STEP 6

Now to create the other ‘passing position’.
Go to frame 13, select all of the frame 13 layers. Hit F6 to keyframe it.

Ctrl+S
To save your work!



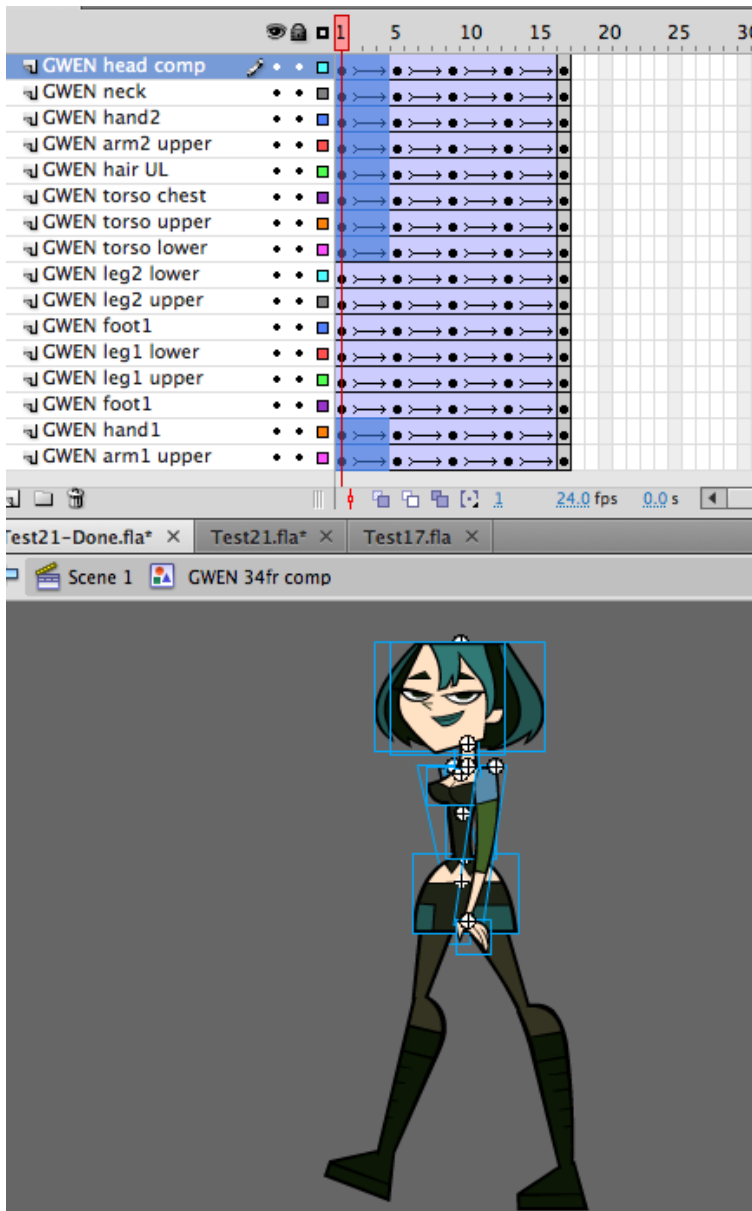
With the onion skin activated and stretched out so you can see frame 5, position the legs into the cross-over pose again, this time with the opposite legs from frame 5. This time “leg2” is the straight leg.

Make sure the contact foot travels in a straight line across the ground, and that you raise the torso, arms, hands and head. The skewing / rotation of the arms and hands should be similar to frame 5’s pose.

STEP 7

Now for the moment of truth!

Select all your frames on all layers, right click anywhere on the timeline and select Classic Tween.



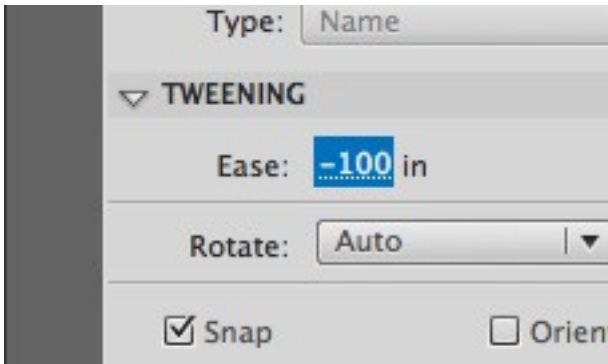
Hit Enter to see it in motion. Go up to Control > Loop Playback to see it cycle. All the hard work is done, now we just have to make some tweaks to perfect it.

If there's any legs detaching and flying off, you know that at some point you chose the wrong leg to reposition. Go back a couple steps and make sure the right leg is in front (or behind).

STEP 8

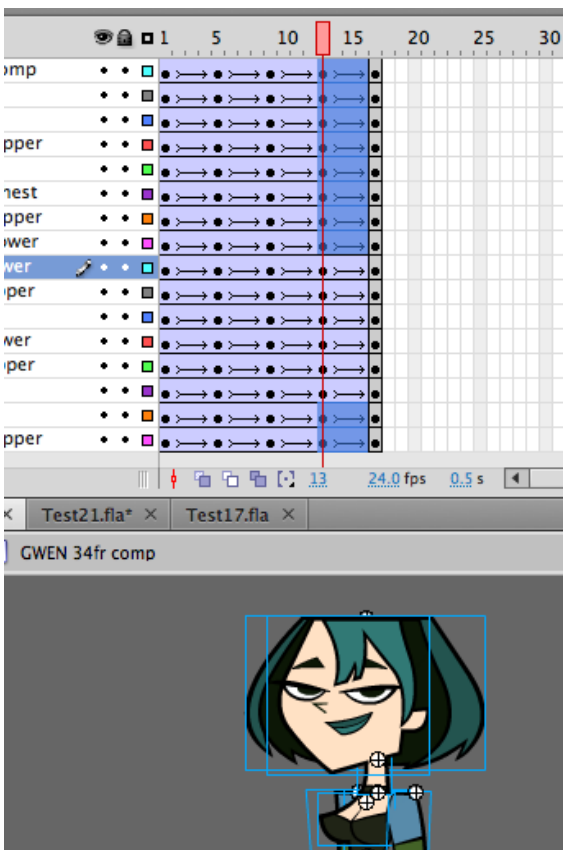
To make the walk a bit less robotic, add some cushion to the arms swings.

Go to frame 1. Select all the frames except the legs and feet. To change the Properties of the tween, go to the Properties tab, if you don't see the TWEENING: ease settings, simply click on the top of the timeline to reveal the tween settings.



Change it to a full ease IN (-100) . Go to Frame 5, and do the same thing, select everything except the legs and feet, and set the tween to a full ease OUT.

Then again at frame 9; full ease IN. and a full ease OUT at frame 13.

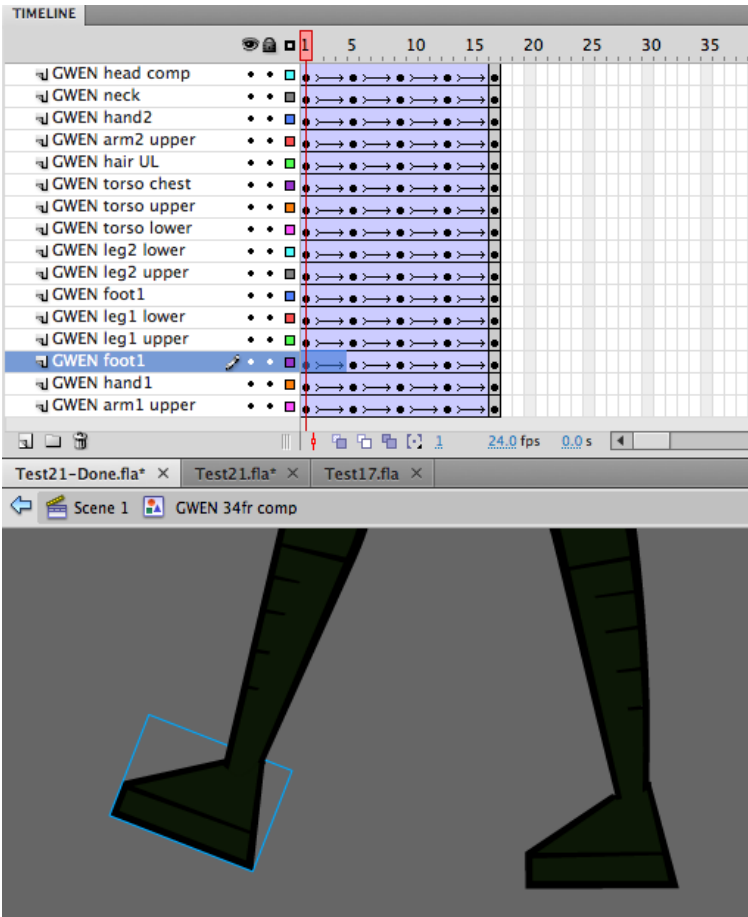


STEP 9

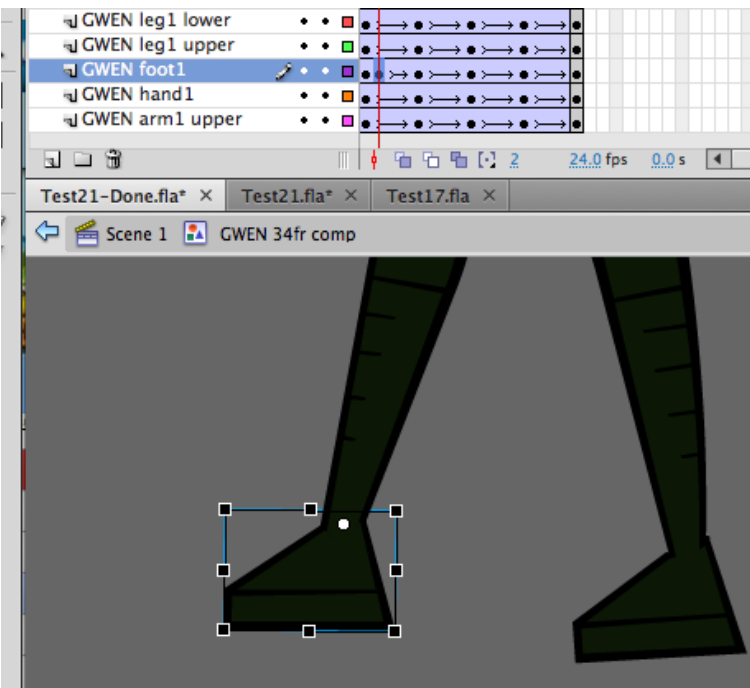
Now, notice how the feet don't stomp down flat after the heel contacts on frames 2 and 10? Well they should... so find the layer with your front foot (frame 2 (screen left), and hit F6 to key frame it.

Ctrl+S

To save your work!



Now rotate it flat.

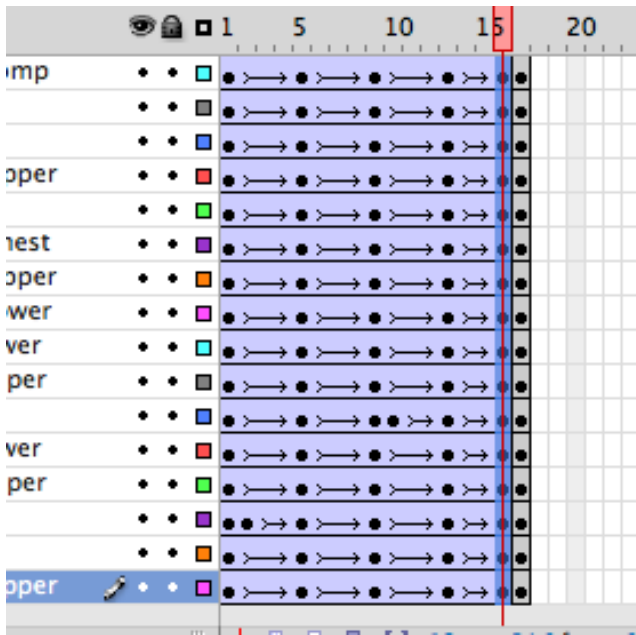


Then do the same for the other one (foot1) and keyframe and rotate it on frame 10.

Now test the animation and you'll notice the character plants her feet down better.

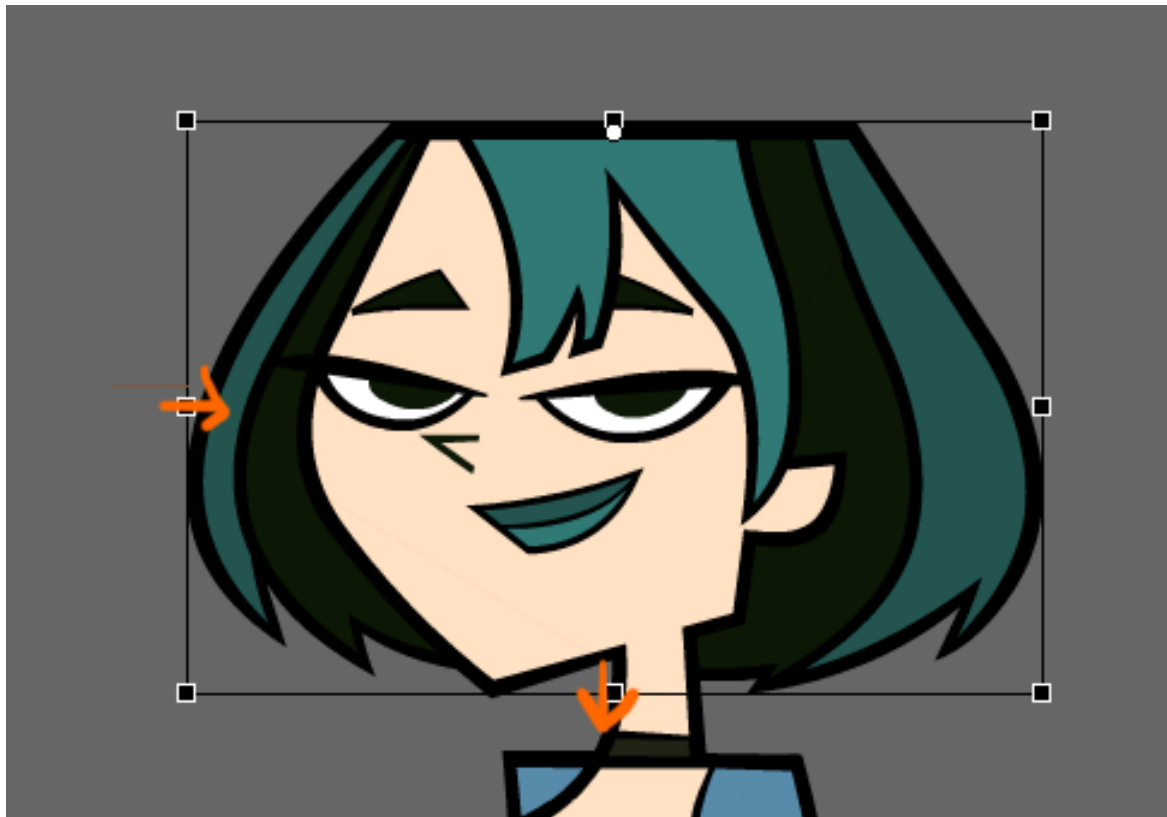
STEP 10

Now to fix the cycle a bit. Notice how the loop sticks at the end? That's because our first and last frame are the same, so make a key frame for all the layers of frame 16. Click and drag to select frame 16 on all layers, hit F6, then select all of the last key frames and hit Shift+F5 to remove the last frame.



STEP 11

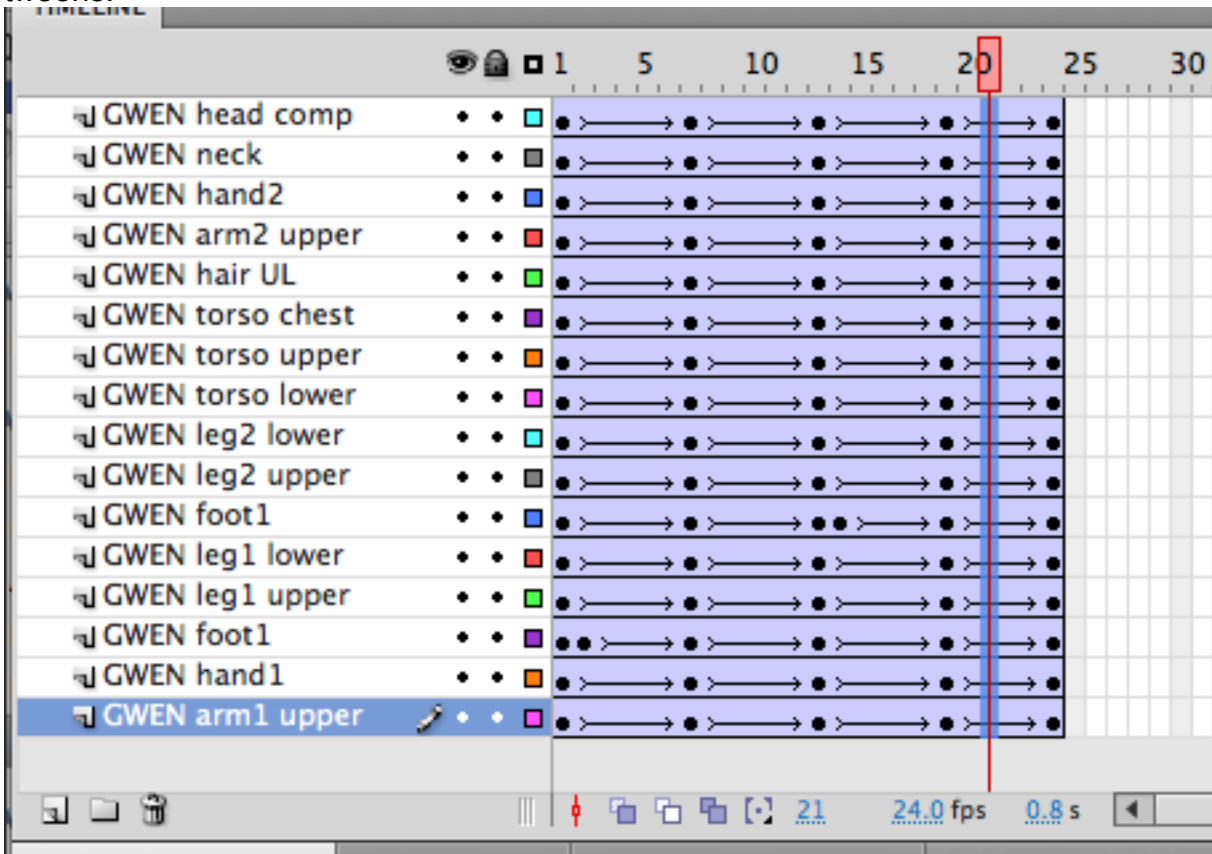
Now to add some finishing touches, a hair bounce on the full stride and mid-stride should add a bit more life to this stiff character. On frame 5, select the hair and hit 'Q' to squash the stretch the hair. Stretch it down slightly and squash it inwards ever so slightly. Repeat the process for frame 13.



STEP 12

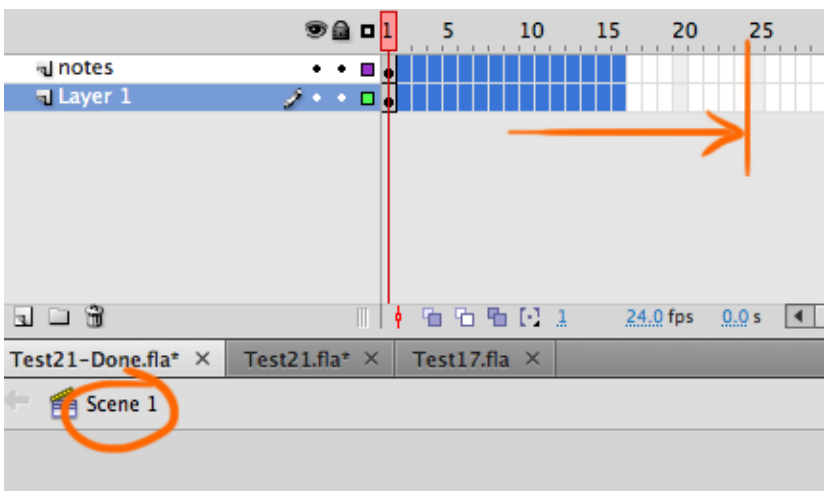
Check to see if the animation is all good and moves smoothly.

Now to slow down the walk a bit, click and drag a vertical line through your timeline anywhere between Keyframes 2 and 5, and add two extra frames (F5 x 2). The do it again between the 3 other gaps, to add 2 frames between the keys with the motion tweens.



This will lengthen your animation by a total of 8 frames, bringing it to a 24 frame cycle.

Click on the Scene 1 button (or just double click on the empty canvas).
Extend your main timeline to 24 frames.
Double check your walk cycle animation.



You're done!

You can experiment with the rotation of the hands, go back into the symbol and tilt the hands the other direction to apply a nice drag effect to that hands.

Ctrl+S

To save your work!

If you want to add a little sass to it...

Go back in to the symbol and try to tilt her hips a bit as she walks.

That's a simple walk cycle with a pre-built/rigged Flash character.