

The Best Fitting Pants—*Ever*

Don't alter somebody else's pattern—draft your own

BY CLAUDETTE GRANT

Nothing flatters like a good fit. And you can take the guesswork out of fitting pants by custom drafting your own pattern from the start. It sounds complicated, but with a few simple measurements, a ruler, pattern paper, a pencil, and my map, it's as easy as working a crossword puzzle. It doesn't take artistic or sewing skill to make a perfect pattern. You just draw a line, and along it, mark points that correspond to your body measurements; then square the lines. (Squaring means drawing a line at 90 degrees to the line containing a referenced point.) Just follow these steps until you have the pattern you've been looking for. It all starts with good measurements.

Claudette Grant is a professional patternmaker who specializes in fitting challenges.

MEASURE UP

Exact measurements are the building blocks for your pattern. Just wear undergarments or a leotard when you take your own. Here's a way to take them without a sewing buddy's help:



1 Inseam: Stand on 1 inch of the tape measure with the heel of your foot, and measure to the crotch. Subtract the 1 inch.



2 Waist:
Measure your waist circumference.

3 Side seam:
Stand on the tape measure with 1 inch under your foot, and measure up to your waist. Subtract the 1 inch.

4 Hip circumference:
Measure the fullest part of your hip.



5 Crotch depth:
Tie a piece of elastic around your waist. Sit on a firm, level surface, and use an L-square or a ruler to measure from the elastic to the surface. Add 1 inch for ease.

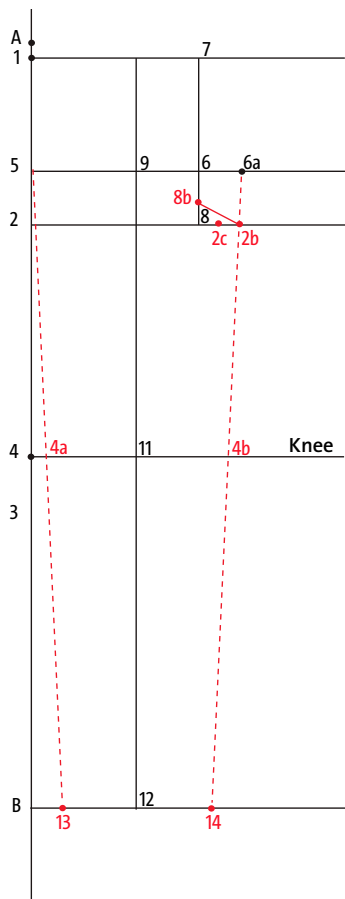
6 Ankle:
Measure the hem circumference of your favorite pants (not shown).

continued ▶▶▶

DRAFT THE FRONT

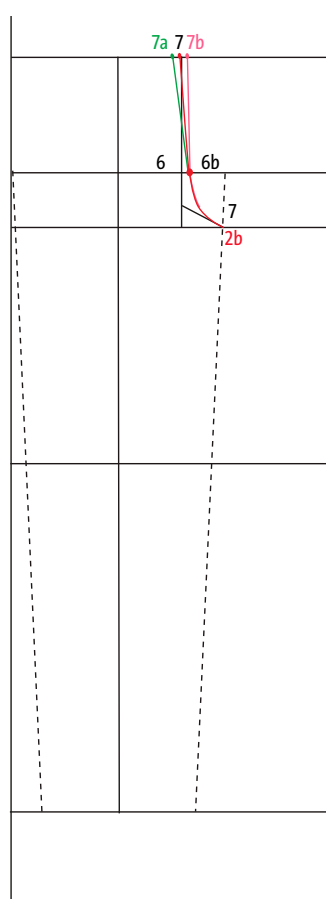
Start with a vertical line drawn at least 4 inches from the left edge of the paper and several inches longer than the side-seam length. Label a point at the top of the line as "A." Measure down the seam length plus $\frac{5}{8}$ inch, and mark a second point labeled "B." (This is the hemline.)

A) MARK POINTS - From point A, measure down $\frac{5}{8}$ inch, and mark point "1." This is the waist. - From point 1, measure down the crotch depth, and label point "2." - Mark point "3" halfway between points B and 2. - From point 3, measure up $\frac{1}{10}$ of your inseam length, and mark point "4" as the knee position. - Take $\frac{1}{10}$ of $\frac{1}{2}$ your hip circumference, and add $1\frac{1}{4}$ inch. Mark that distance up from point 2 as point "5." This is the hipline. - Square lines out from points 1, 2, 4, 5, and B.	B) ADD CIRCUMFERENCE MEASUREMENTS - From point 5, measure out $\frac{1}{4}$ of the hip circumference minus $\frac{3}{8}$ inch, and mark point "6." Square a line up and down to lines 1 and 2. - Mark the intersecting points "7" and "8" as shown. - Fix point 6a from 6 by dividing $\frac{1}{2}$ your hip circumference by 10 and adding $\frac{1}{4}$ inch.	C) ESTABLISH THE CREASE LINE - Center a mark between 5 and 6a. Label it "9." - Square a line through 9 up to the waist and down to the ankle. This is the crease line. - Mark points "10," "11," and "12" as shown at the crease line intersections.	



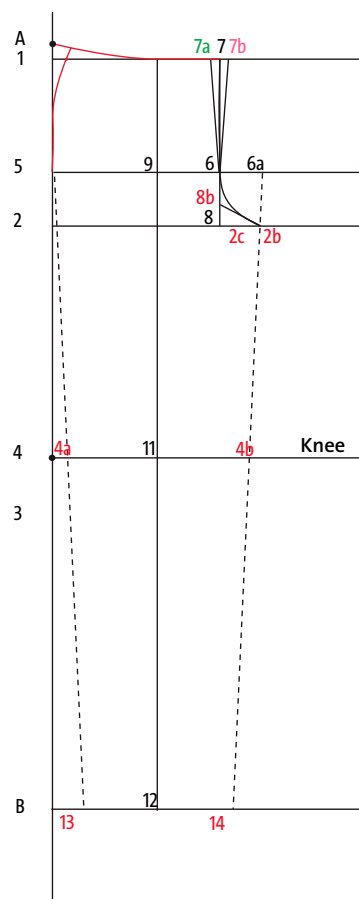
D) SHAPE LEG

- Transfer your favorite pant width to your draft by marking $\frac{1}{4}$ of the hem circumference minus $\frac{3}{8}$ inch on each side of point 12. Label these points "13" and "14," as shown.
- With dotted lines, connect 13 to 5 and 14 to 6a. Find the center between 2b and 8, and mark it "2c." Using the same measurement, make a point "8b" towards 6.
- Draw a line from 8b to 2b.



E) ADJUST FOR YOUR STOMACH

- For an average stomach, work from point 7.
 - a. For a flat stomach, mark a new center-front point $\frac{1}{4}$ to $\frac{3}{8}$ inch left of point 7. Label it "7a."
 - b. For a protruding stomach, mark a new point $\frac{1}{4}$ to $\frac{5}{8}$ inch to the right of point 7. Label it "7b."
- On the hipline, mark a point called "6b" $\frac{1}{4}$ to $\frac{3}{8}$ inch right of point 6. Draw a straight line between 6b and 7, 7a, or 7b (whichever is right for your draft).
- To complete the rise, draw a line curving gently to 2b, incorporating the angle created earlier.



F) CURVE THE WAISTLINE

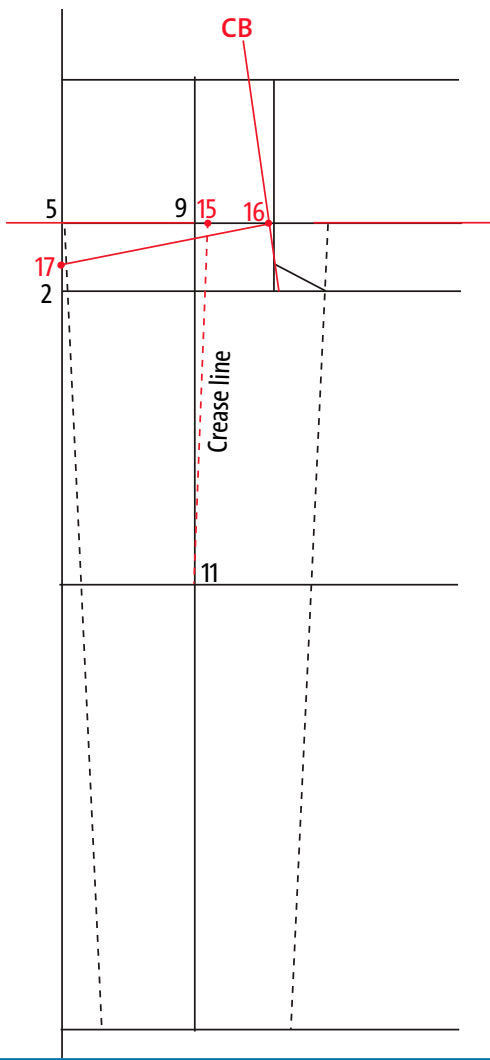
- On the waistline from point 7, 7a, or 7b, measure $\frac{1}{4}$ of your waist circumference plus 1 inch for the dart depth, and draw a gently curved line connecting to point A. The shape of this line will be finalized in the fitting.
- From point A, curve a side seam to the hipline at point 5.
- The crease line is also the dart's fold line. Mark $\frac{1}{2}$ inch dart depth on each side, and mark the dart point $3\frac{1}{2}$ inches below (not shown).

continued >>>

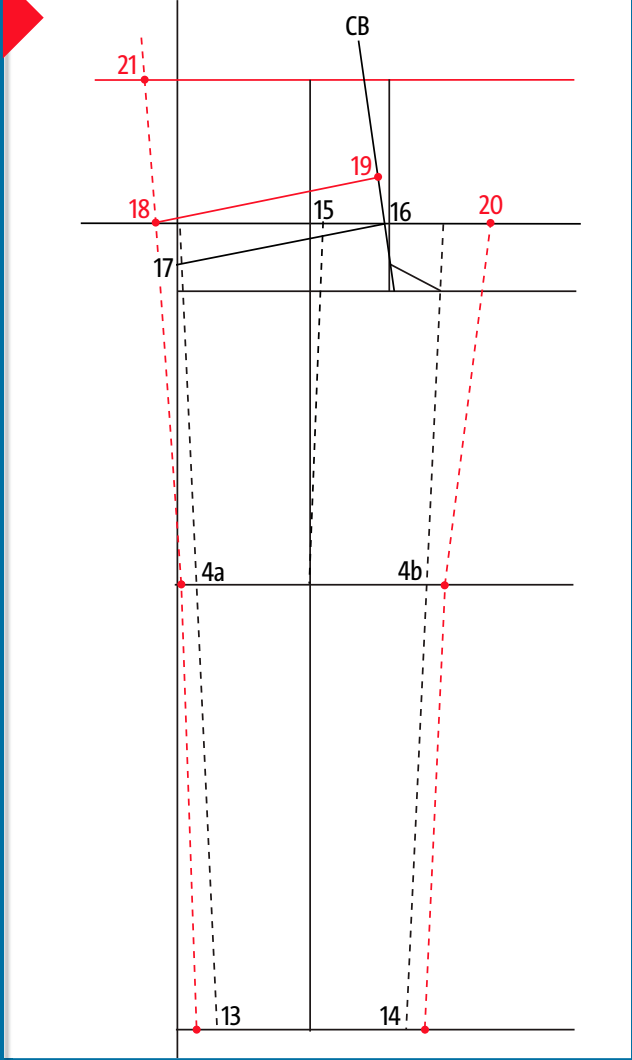
DRAFT THE BACK

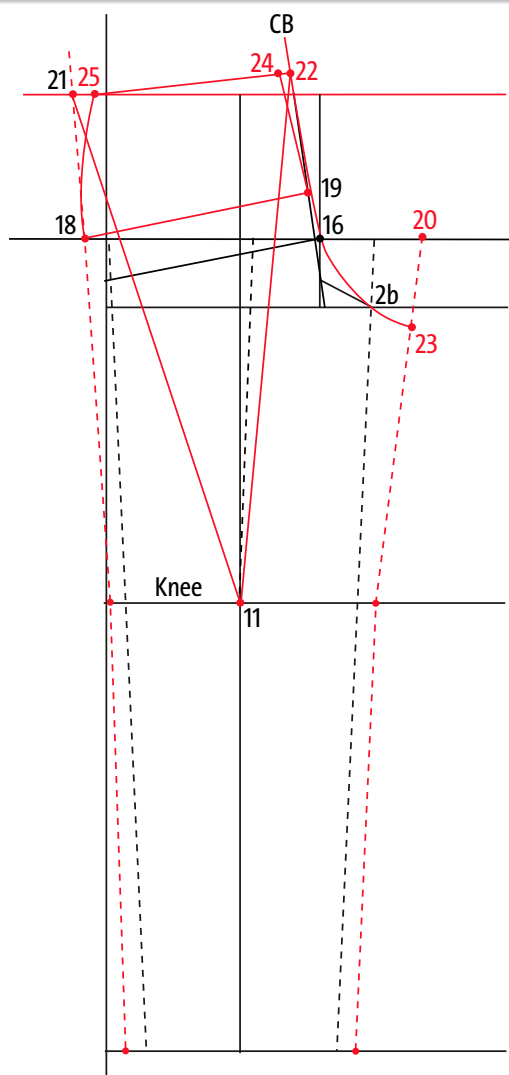
Draft the pant back over the pant front. You can draw right on the front in a different color and trace copies later to use as patterns, or you could tape paper you can see through over the front draft.

A) FIND THE CENTER BACK

- Extend line 5 (hipline) on both ends.
 - Mark a point $\frac{3}{4}$ inch to the right of point 9 on the hipline. Label it "15." Draw a dotted line from point 15 to point 11 (this becomes the crease line for the back of the pant leg).
 - Divide the hip circumference by 4, and add $\frac{3}{8}$ inch. Then take $\frac{1}{4}$ of this measure, and mark this distance along the hipline to the right from 15. Label it "16." Typically, point 16 falls inside the body of the previous pattern piece.
- 
- For the next step, mark point "17" up from point 2 on the side seam. But first, assess the shape of the derrière.
 - a. For a normal/average seat, measure up $1\frac{1}{2}$ inch.
 - b. For a flat seat, measure up 2 inches.
 - c. For a protruding seat, go up $\frac{7}{8}$ inch.
 - Join 17 to 16 with a straight line. At point 16, square a line up past the waist and down to line 2. This is the center-back (CB) line.

B) SHIFT THE HIPS

- From point 16, measure $\frac{1}{4}$ your hip circumference plus $\frac{3}{8}$ inch, and mark point "18." From point 18, draw a line parallel to line 17-16. Mark point "19" where it intersects CB.
 - Measure the distance from 18 to 15, and mark that length from 15 to the right on the hipline. Label it "20."
 - Measure $\frac{3}{4}$ inch outside points 13, 14, 4a, and 4b, and draw dotted lines to connect the points from the ankle to the knee on both sides.
 - From the knee, take the inseam line straight up to point 20. On the side seam, extend the line through the hipline point 18 and past the waistline. Label it "21."
- 

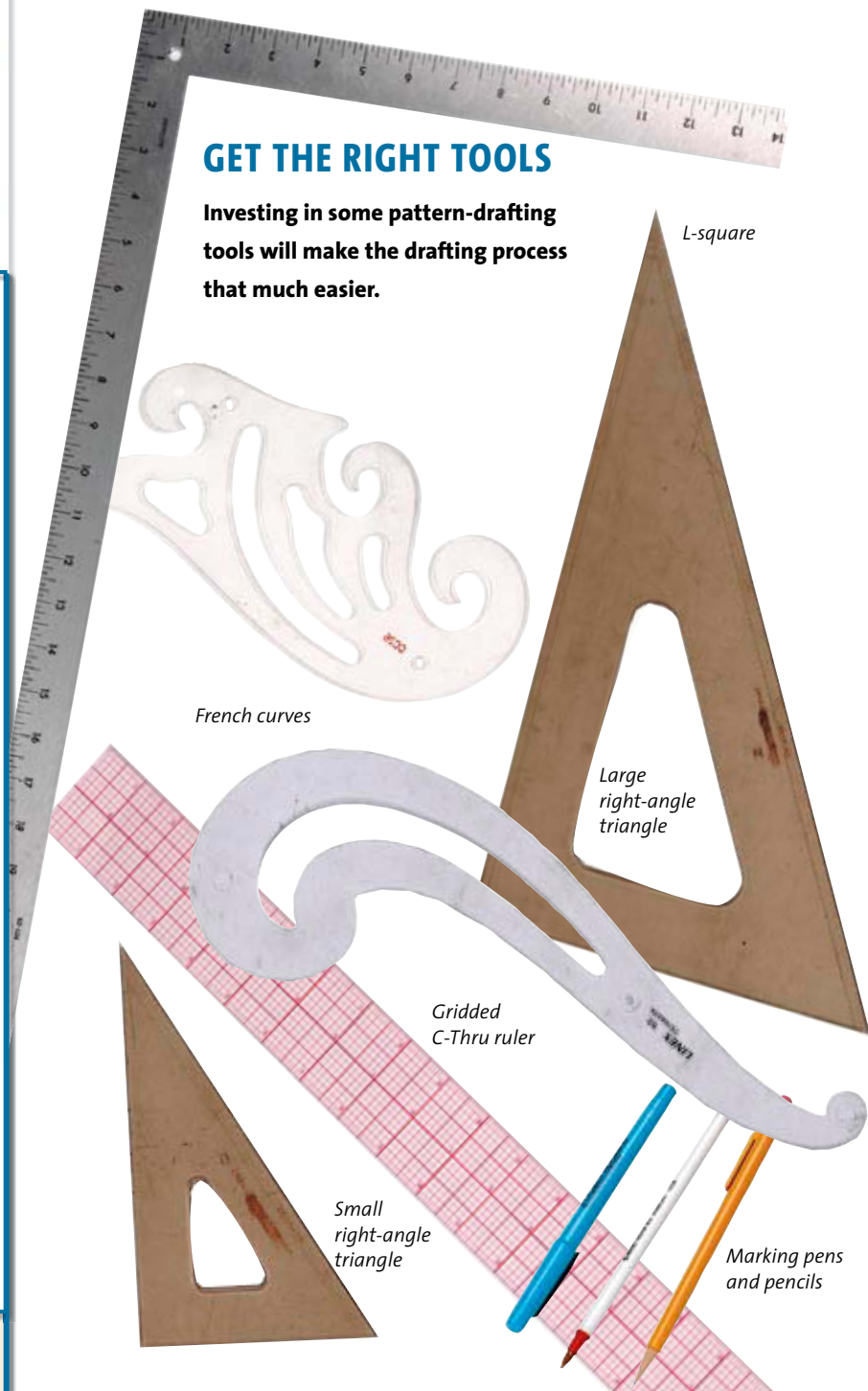


C) FIND CENTER BACK AGAIN

- Measure from point 21 to point 11, and mark point “22” that length from point 11 to the CB line.
- The front inseam length from the knee to 2b is the same on the back minus $\frac{1}{4}$ inch. Label that point “23.”
- At point 22, go in $\frac{1}{4}$ to $\frac{3}{8}$ inch. Label that point “24.”
- Draw a line from point 24 to point 19. Curve a line gently from point 16 to point 23 for the back crotch.
- From point 24 to 21, find $\frac{1}{4}$ of your waist minus a $\frac{1}{4}$ inch, add the desired dart depth, and mark as “25.” From this point, gently curve to point 18.

GET THE RIGHT TOOLS

Investing in some pattern-drafting tools will make the drafting process that much easier.



TEST FIT WITH A MUSLIN

Trace your draft to make your first pattern to test your fit. Add seam allowances and a hem allowance. Cut an inexpensive, stable fabric to test, and perfect the pattern on your body. Correct your pattern from this fitting. Now you have a master pant pattern that fits and can be modified for style changes.