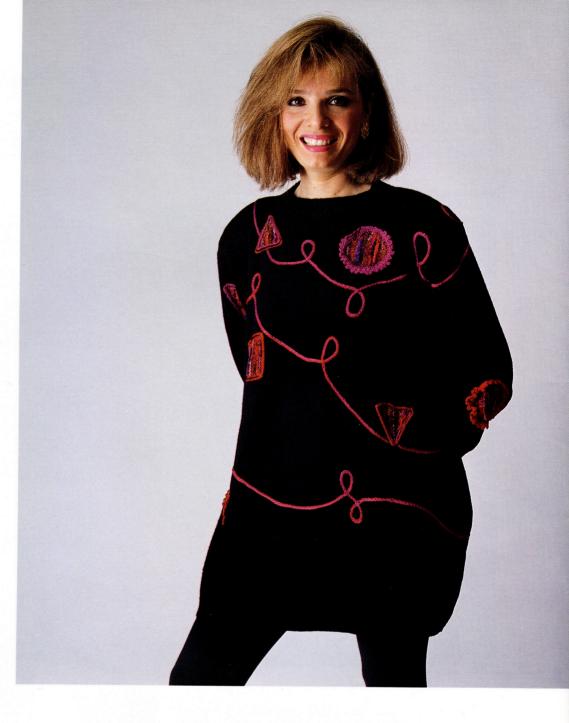
## Susan Guagliumi

## Geometric Ladders

All of the squares, circles, and triangles in this sweater were created with wide ladders that were shaped by a unique method of casting on and binding off midrow. The color and texture was added afterwards by needle weaving, which is a great way to use up odds and ends or to indulge yourself in a ball or two of something wonderful! Chain crochet details link the shapes and add color accent.



**Size:** One size fits most. Oversized, tunic length sweater with finished bust measurement 60" and length 31.5".

**Machine:** SK830 (SK270) 3.6-mm fine-gauge K/M with ribber. (The oversized fit requires 246 STS across the bust, so although this yarn knits beautifully on a standard gauge K/M, you'll need to work on a fine gauge bed in order to have enough NDLS.)

**Stitch Size:** 7 or to match gauge in stockinette; SS 3/3 for sleeve and neckline ribs, 4/4 for body ribs. Model garment was K on the SK830 (3.6 mm) fine-gauge machine.

**Gauge:** 8.5 STS/11 Rs = 1".

**Materials:** Newton's Knits' "Cashwool" (50% cashmere/50% wool with 2500 yd/lb) 22 oz black for MC. 3-5 oz miscellaneous novelty yarns for needle weaving shapes and working chain stitch. "Perfect Sew" fabric stiffener (available in some fabric stores or from Knitting and Sew Forth), dressmaker's chalk. Shoulder pads optional.

Knitting Notes

**Bridging Basics** Bridging is a holding method that gives you total control over every NDL on the bed and is probably the single most liberating hand manipulated technique! It enables you to work your way across a R changing SS, adding extra Rs, adding surface details, or (in this case) C/O and B/O STS; because you are able to interrupt the carr and work with the carr yarn there's no need to add extra pieces of yarn that require finishing later.

Bridges are the NDLS that separate or lead up to the NDLS that will be C/O or B/O. You will need to K them, hold them, and back up the carr to work your way across the R. Make sure the RC is off before you beg any bridged Rs, then turn it on and advance by one when the R is done. Although the fol directions call for beg with the COR, this is only to simplify the directions and you can work from either side once you understand what you are doing.

The bottoms of the squares, circles, and triangles (those pointing up) are begun by B/O STS mid-row; the tops of the squares, circles, and triangles (pointing down) require C/O mid-row. Only the first (or last) R will require bridging; all of the other shaping is done by full fashioned dec/inc. See page 10 below, for exact location of each of the shapes. The chart indicates how many STS from the edge or from center zero to beg working as well as the RC when each shape starts. Page 10, center, shows exact inc/ dec for each of the shapes, which were drawn to gauge.

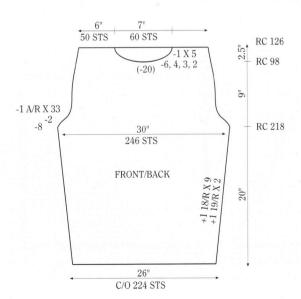
To bind off stitches mid-row: Turn off RC. Begin COR. Russel levers (I) to hold NDLS in HP. Bring all NDLS to HP except the first bridge on the carr side. K 1 R, then hold the NDLS just knitted. Move COR. Place the next group of NDLS (those for a square, etc) in UWP and with largest SS, K 1 R. Latch tool B/O these enlarged STS and transfer last ST from latch tool to adj working NDL. Put empty NDLS in NWP and move COR. Place next group of NDLS (bridge at L of shape) into UWP, change back to regular SS, and K to L. Turn on RC and advance by 1.

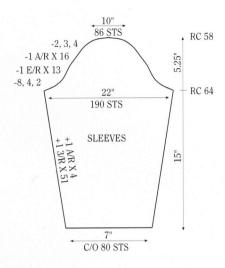
To cast on stitches mid-row: Turn off RC. Begin COR, Russel levers (I). Bring all NDLS to HP except the first bridge on the carr side. K 1 R, then hold NDLS just K. Bring empty NDLS to HP and e-wrap or latch tool C/O. Leave newly C/O NDLS in HP and move COR. Place next group of NDLS at L into UWP and K

Garment Notes: Body is inc from hem to armhole to refine oversized fit; narrow cuff supports sleeve and minimizes bulk. Armhole shaping is a combination of set in and raglan shaping. Make all single decs on body and sleeves ff with 3-prong tool. Follow placement chart, p. 10, for each garment piece.

Knitting Directions Back: C/O 224 NDLS in 1 x 1 rib and K 20 Rs SS 4/4. Tr all STS to MB, change to SS 7 to K body in stockinette, bridging and creating ladder shapes at locations shown on p. 10 and as described in Bridging Basics; while inc 1 ST each side every 18 Rs 9 times, then every 19 Rs twice. At RC 218 beg shaping armholes. RC 000. B/O on A/R 8, 2 then 1 ST 33 times at each side. At RC 126 S/O 50 STS for each shoulder and 60 STS for center back neck.

Front: K same as back to RC 98 above armhole to divide for neck, fol chart for front shapes placement. With COR and Russel levers (I) hold center 20 NDLS and all NDLS to the L of them. KWK. On A/R when COR hold 6, 4, 3, 2, 1 (5 times) NDLS at









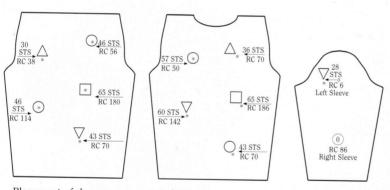
neck edge. At RC 126 S/O 50 RT shoulder STS, move COL and re-set RC 98 to rep for L side. S/O front neck STS.

**Sleeves:** Make 2 alike, creating ladder shapes as shown on p. 10. C/O 80 STS for 1 x 1 rib and with SS 3/3 K 20 Rs. Tr all STS to MB and K stockinette with SS 7, inc 1 ST each side every 3 Rs 51 times, then A/R 4 times to 190 STS. At RC 164 beg shaping armhole. RC 000. B/O on A/R 8, 4, 2 STS each side; then dec 1 ST A/R 16 times, 1 ST E/R 13 times. B/O on A/R 2, 3, 4 STS at each side. At RC 58 B/O rem 86 STS.

Finishing Directions

Lightly block all pieces. Join 1 shoulder seam and with wrong side facing you rehang live STS and make STS as necessary along straight edges of front neckline. Tr EOS to RB for 1 x 1 rib and with SS 3 K 12 Rs. B/O loosely. Join second shoulder seam, sleeves to armholes, side and underarm seams. Work in all yarn tails. Needle weaving: "Perfect Sew" wash-out fabric stabilizer will make it much easier to work with these large ladders. Fol package directions and apply to all of the ladder shapes and lay flat to dry. To prevent pieces from sticking to each other, lay a piece of wax paper—covered cardboard inside garment, pin to hold shapes, then apply and let dry thoroughly. Thread double lengths of novelty yarn and weave over two, under two ladder bars to fill in each shape. At the end of each R, turn and weave back. Push each R up close to the previous one to cover the ladder bars. Needle weaving is a lot like making pot holders in Girl Scouts! Work all ends into the backs of shapes.

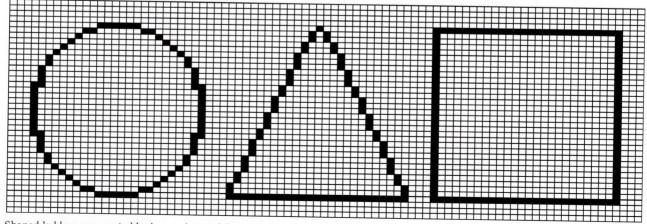
*Chain Stitching:* Use chalk to mark lines and loops as shown in photo. With crochet hook work 2 parallel Rs of chain ST. You may also want to add some chain ST around the shapes themselves.



Placement of shapes on garment pieces.



Fashion pose by Cochenille Computer Knit Products



Shaped ladders are created by increasing and decreasing as shown above. The flat beginnings and endings are cast on or bound off with the aid of the bridging technique described in text.