






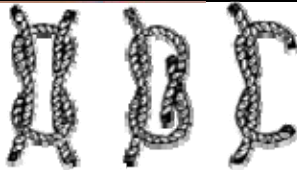
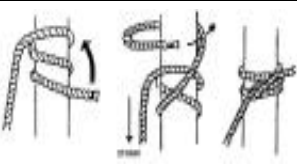


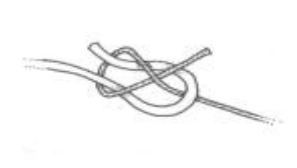


Essential Boating Knots

Knot, Bend, Hitch or Splice	Knot, Bend, Hitch or Splice	AKA	Use(s)	Comments	Variation	Instructions BE=Bitter End, SP=Standing Part
	Fisherman's Bend	Anchor Bend (hitch?)	Line to an Anchor, Spar or Ring	Can be difficult to untie	Round Turn and Two Half Hitches	Take BE two turns around object, BE over SP and inside of turn, complete with BE over-&-under SP (half hitch). BE can be seized to SP for semi-permanency.
	Belaying Hitch	Cleat Hitch	Lines to cleats such as docklines.			Take a turn around bottom of cleat starting at far end, BE across top of cleat and around far horn, BE across top of cleat, under near horn and under last loop ending parallel to first cross with BE on opposite side of SP.
	Bowline		Non-slipping loop in the BE.	"King" of knots	Bowline on a bight-used for lifting a person. SP is doubled to form two large loops for the person's legs. Large loops are passed thru the BE.	Form a small loop in SP, with BE on top, allowing enough BE to form the final loop. Bring the BE through the small loop from behind and on the same side of the SP as the small loop. Take BE around SP, back through thru the small loop and tighten. BE should be on the inside of the large loop. Outside OK - called a 'Left-handed' or Dutch Marine Bowline.
	Chain Sinnet	Daisy Chain	Stowing or shortening lines. Snubber. Washing Rope	Will not tangle. More difficult with stiffer rope.	Can be stopped at any point effectively shortening the line.	Starting with the SP, tie an overhand knot with a loop in the line. Form subsequent loops (about the same size) by passing the line adjacent thru the last loop. Finish by passing BE thru last loop.
	Clove Hitch		Line to a Pole		Ashley's Constrictor	BE over-&-under object, BE over SP, BE over-&-under object. BE under last turn and over object ending parallel to and pointing away from SP.
	Figure of 8 Knot	Line Stopper	Stopping a line from running through a block.	Desirable for all working sheets and halyards.		Form a loop in BE with BE pointing in same direction as SP. Take BE over-&-under SP away from loop. Take BE back over the last loop (not the SP) and down thru the original loop.
	Flemish Coil		Excess docklines, Sheets, Halyards, etc.	Safe to walk on, dries faster, looks good.		Starting with BE in the center, start a flat coil outward (CW if a 3-strand or laid line) with the turns lying against, without riding over, each other.

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Knot, Bend, Hitch or Splice	Knot, Bend, Hitch or Splice	AKA	Use(s)	Comments	Variation	Instructions BE=Bitter End, SP=Standing Part
	<p style="text-align: center;">Reef Knot</p>	<p>Square Knot</p>	<p>Knot of two lines of same size.</p>	<p>Easy to tie and upset.</p>	<p>Granny (BE on opposite sides) will slip. Surgeon's Knot.</p>	<p>Left BE over-&-under right BE, right BE over-&-under left BE. BE's should be on the same sides. (The first step is repeated in a Surgeon's knot.)</p>
	<p style="text-align: center;">Rolling Hitch</p>		<p>Attaching one line to another or a post.</p>	<p>Clearing jammed winches. Knot can be 'slipped' into another position</p>	<p>Camel Hitch</p>	<p>Take two turns around the taut line in the direction of the SP. Take BE over both turns. Take another turn finishing under the same turn with BE on opposite side of SP. (Repeating last step is a Camel Hitch that will not slide easily).</p>
	<p style="text-align: center;">Round Turn and Two Half Hitches</p>		<p>Line to an Anchor, Spar or Ring</p>		<p>Fisherman's Bend or Anchor Bend</p>	<p>BE once (or twice) around object, 2-half hitches (clove hitch) around SP.</p>
	<p style="text-align: center;">Sea Coil</p>		<p>Stowing lines.</p>			<p>Form a coil of loops the same size, approx. 1-3', held in one hand. Twist each new loop with opposite hand to keep loops flat. Wrap BE 3-4 times around coil tightly. Pull last wrap thru inside then over the top of the coil. Tighten with BE.</p>
	<p style="text-align: center;">Sheet Bend</p>		<p>Join Smaller Line to a Larger Line</p>		<p>Double Sheet Bend</p>	<p>Form a loop in the larger line with BE beside and pointing toward SP. Pass BE of smaller line up through the loop and once around the SP of larger line. BE under smaller line across top of loop. BE's of both lines should be on same side.</p>
	<p style="text-align: center;">Whipping</p>		<p>Keeping bitter ends from fraying.</p>	<p>Easy to tie. Whipping line required.</p>	<p>Many variations including West Country Whipping and heat shrink tubing.</p>	<p>Lay loop of marline longitudinally on rope and wrap around rope starting away from loop. Continue until whipping length is just > rope diameter. Take BE and insert thru original loop. Pull on SP until BE disappears then trim. West Country Whipping: Starting with the middle of the marline, tie successive overhand knots on opposite side of the line, alternating L over R with R over L until whipping is just > line diameter. Finish with Surgeon's Knot.</p>