

Troop 316 Knots and Lashings

Resources:

<http://www.animatedknots.com/indexscouting.php>

<http://scoutingmagazine.org/2016/04/tie-essential-scouting-knots/>

Knots in **bold** are required for scout advancement.

Stopper Knots

Overhand knot

The overhand knot is a stopper, especially when used alone, and hence it is very secure, to the point of jamming badly. It should be used if the knot is intended to be permanent. It is often used to prevent the end of a rope from unraveling. It is the basis of many other knots.



Figure Eight

The figure eight is often used in climbing and sailing for its effective performance as a stopper knot. The knot can quickly and easily be tied to prevent a rope from being pulled out of a retaining device. Yet even after great strain is put on the knot, the figure eight can easily be untied and if needed quickly retied elsewhere. This is an enormous advantage because some other stopper knots might pull so tightly that a scout would have to cut the rope in order to get it untied. Can also be used to form a loop at the end of a rope if tied on a bight.



Joining Knots

Square Knot

The basic knot and often the first thing taught to a brand new scout. The square knot has few purposes outside of simply tying the ends of a rope off to secure it. Therefore it is often used in conjunction with other knots in a support role. The square is often used in First Aid when tying bandages or securing splints. The Square can be used to connect two separate knots but it is not as strong as other knots that can accomplish the same task.



Sheet Bend

The Sheet Bend is an excellent knot for joining two pieces of rope. The Sheet Bend is particularly effective at joining ropes of different diameters.



Double Sheet Bend

Similar to the sheet bend, but adds an extra wrap to make the knot more secure.



Slippery Sheet Bend

Same as sheet bend but a loop is used to make it easy to untie.



Water Knot

Used to join flat webbing. Basically an overhand knot. The Frost knot is similar but is an overhand knot tied on a bight at the end of the webbing to form a loop.



Loop Knots

Slip Knot

The Slip Knot is a simple knot in which one end of rope is used to tie an overhand knot onto some other piece of the same line. This will create a large loop but due to the simple nature of the knot it will easily "slip" to tighten or loosen. For this reason the Slip Knot should not be used as a rescue knot (around people) because it will continue to tighten and constrict. Note that a figure 8 knot can also be used to make the knot more secure.



Bowline

The Bowline is one of if not the most important knots. It is similar to the Sheet Bend except that rather than connecting two ropes it forms a fixed loop at the end of a rope. This loop can go around or even through an object to secure it. The bowline is used widely in sailing and is also a rescue knot in climbing. There are numerous variations of the bowline which improve upon the basic version or specialize for a specific function. A knowledgeable scout might also be able to tie a one-handed Bowline around his own body.



Bowline on a Bight

A bowline knot tied on a bight (loop) of a rope. Useful in making a rescue seat by making the loop of different lengths. A person sits on one loop and the other (shorter loop) goes around the chest.



Alpine Butterfly

A strong loop tied in the middle of a rope.



Figure 8 Loop

A figure 8 tied on a bight at the end of a rope. Often used to secure a rope to a climbing harness. Less bulky than a bowline, but not as easily untied.



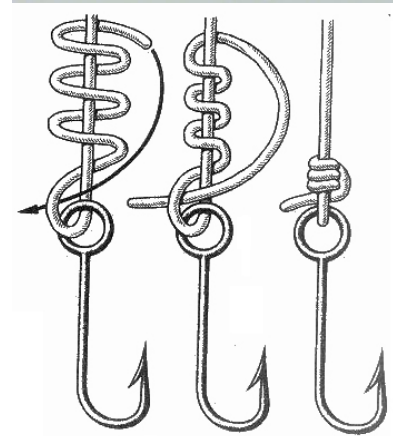
Perfection Knot

Commonly use in fishing to make a loop in the end of a line.



Clinch Knot

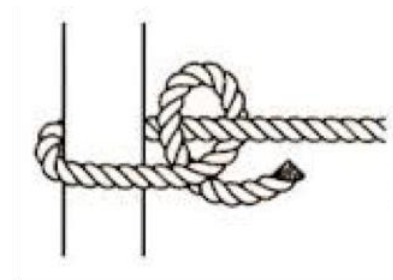
Commonly used to attach a hook to fishing line.



Hitches

Half Hitch

Rare used by itself. It is an overhand knot tied around a post or ring. It is used as part of other knots.



Clove Hitch

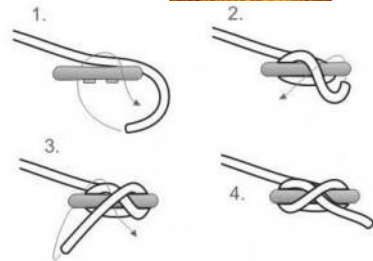
Used to attach a rope to a round post. Commonly used to start and stop a lashing.

**Two Half Hitches**

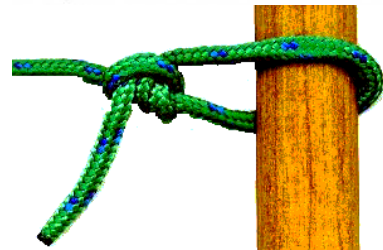
Same as a clove hitch but tied around a rope to make a sinching loop.

**Cleat Hitch**

Use to tie a boat or flag to a cleat.

**Taughtline**

While most other knots are meant to remain stationary or to tighten around an object, the Taught Line is designed to be an easily adjustable knot which can be slide back and forth to both maintain tension on a line but also to lengthen or shorten it as necessary. Good knot for tying tent lines. A variation of this knot is started with 2 half hitches instead of two wraps.



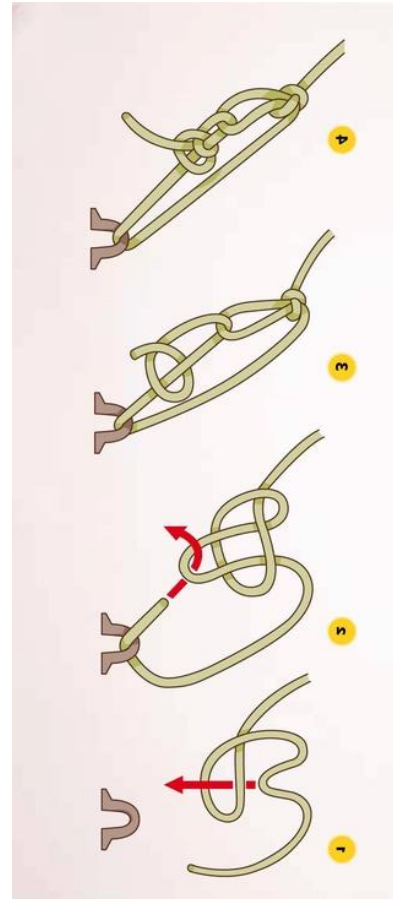
Timber Hitch

The Timber Hitch is used to secure a rope to a cylindrical object such as a piece of timber or pipe. Unlike the more secure Clove Hitch, the Timber Hitch is faster to tie and also much easier to untie no-matter the amount of tension previously put on the rope. May be tied with additional half hitches along the length of the timber or pipe.



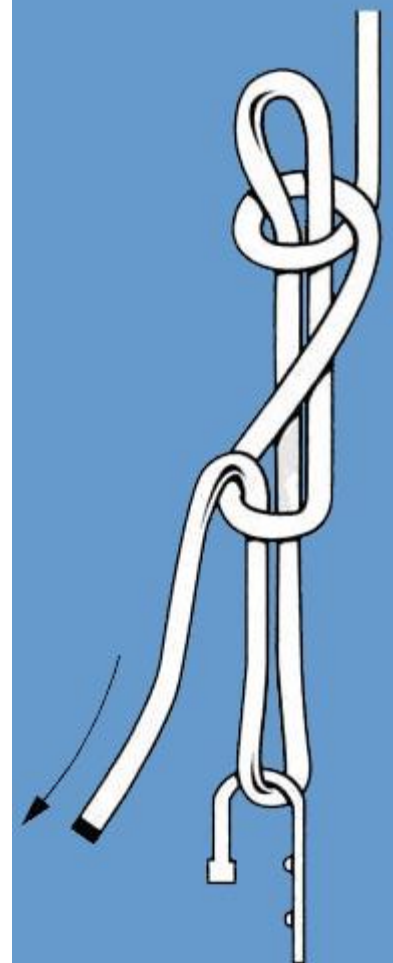
Trucker's Hitch 1

This version is a very secure method of tying down a load and provides mechanical advantage for tightening. Secure the end with half hitches. Note that the slip knot is difficult to untie but it cannot come undone during transport.



Trucker's Hitch 2

This version is very quick to tie. When using poly rope add an additional twist to the loop. Note: This knot should not be used for heavy loads as it can come apart. Very easy to untie. Secure the end to the hook with a clove hitch.



Prusik Knot

Used to make a sliding connection to a rope. Commonly the Prusik is tied in smaller cord than the main rope. One tied the knot can slid up the rope but will lock once tension is applied. Useful in ascending a rope or hauling. Commonly used for climbing and white water.



Lashings

Square

Square lashing is a type of lashing used to bind poles together at right angles.



Diagonal

Used to attach poles that may not be at a right angle such as a cross brace.

**Shear and Tripod**

Shear (2 poles) and Tripod (3 poles are used when the poles need to rotate to form an "X" or tripod.



Scouting Rank Knot Requirements:

Tenderfoot

- 3a. Demonstrate a practical use of the square knot.
- 3b. Demonstrate a practical use of two half-hitches.
- 3c. Demonstrate a practical use of the taut-line hitch.

2nd Class

- 2f. Demonstrate tying the sheet bend knot. Describe a situation in which you would use this knot.
- 2g. Demonstrate tying the bowline knot.

1st Class

- 3b. Demonstrate tying the timber hitch and clove hitch.
- 3c. Demonstrate tying the square, shear, and diagonal lashings by joining two or more poles or staves together.
- 3d. Use lashings to make a useful camp gadget or structure.

