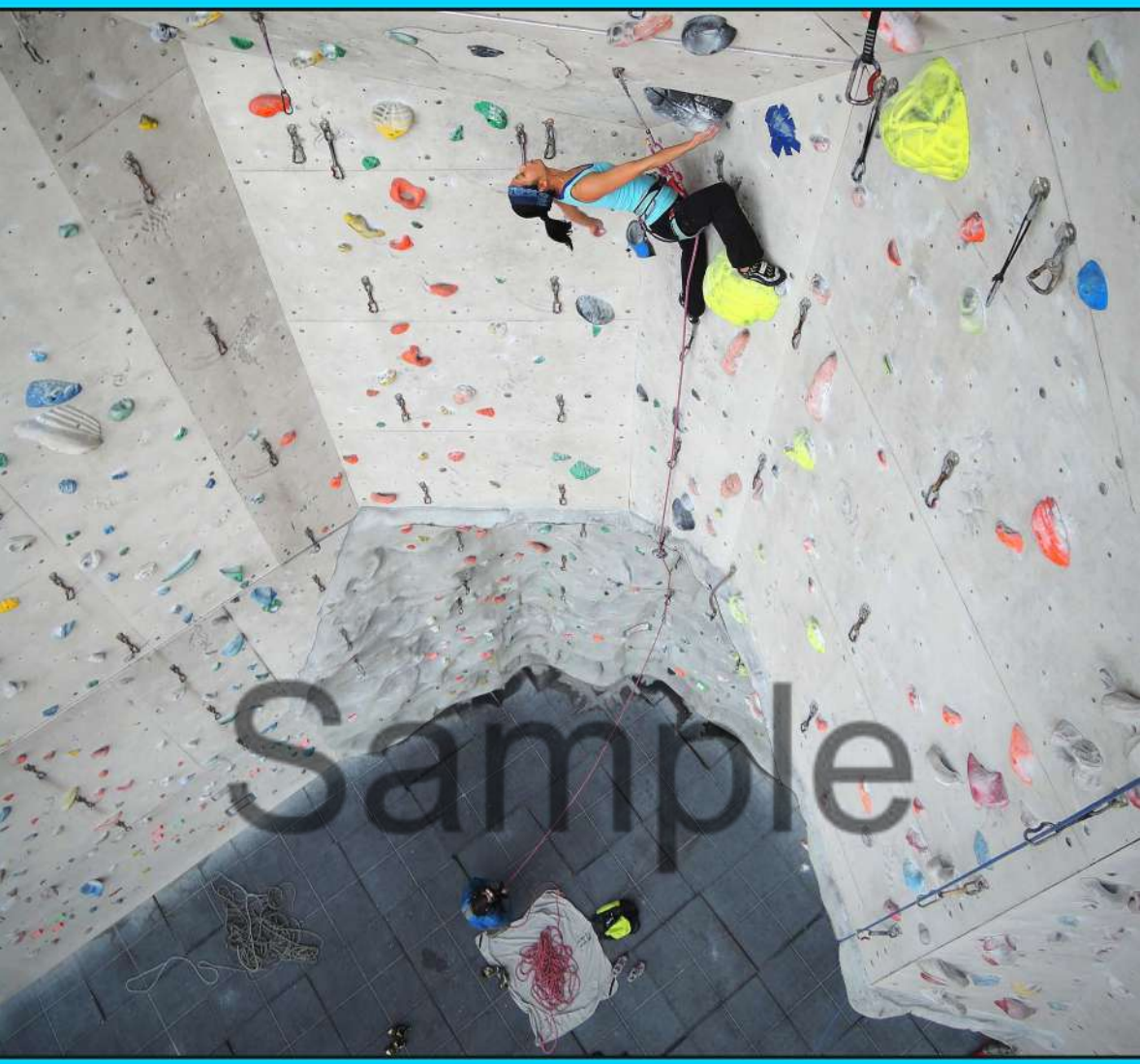


Rock Climbing Basics

The Beginner's Guide to Indoor Climbing

VDiff Climbing

Climbing Ropes

Most climbing gyms have ropes for you to use, but some require you to bring your own.

Number of Falls

Every climbing rope is rated for a certain number of falls. This is the number of falls using a specific UIAA test which indicates how many falls a rope can take before it breaks.

Every UIAA certified rope is tested far more severely than you are likely to experience when climbing, so you don't need to retire your rope just because it's rated to six falls and you've taken seven.

In real climbing situations, a rope will withstand hundreds of falls. They don't fail unless they run over a sharp edge of rock, which cuts it, or if they have been stored amongst sharp objects or acidic chemicals such as bleach or leaking batteries. They do, however, wear out over time, especially if you take a lot of falls, so make sure to inspect your rope regularly (see page 19).

Rope Type

Most beginners start with a 'single' rope. They are thick, durable and easy to belay with. Single ropes are marked with a ① symbol at the end of the rope.

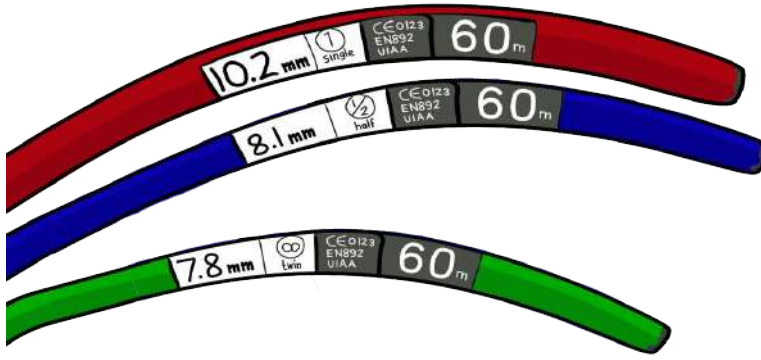
Be aware of half ropes and twin ropes (marked with ½ and ∞ symbols). These thinner cords are designed to be used as a pair.

Diameter and Length

Climbing ropes are available in a range of diameters and lengths. Longer ropes enable you to climb longer pitches, but they weigh more. Thinner ropes are lighter, but wear out faster.

A 60m length with a diameter of between 9.7-10.2mm will suit most beginners and last well into your climbing career.

Be aware that the diameter of your rope may affect which belay devices you can use with it. Some devices will not work well, or at all, with very thin or very thick ropes.



The Climbing Harness

Gear Loops
These are for clipping gear to, such as quickdraws, so you can take them with you as you climb. They're not strong enough to hold your weight, so never attach the rope to them.

Buckle
Buckles adjust the size of your harness for a comfortable and tight fit. It's important that they are fastened correctly (see page 23).

Waist Belt
This fastens around the smallest part of your waist.

Elastic
These stretchy pieces of fabric help to stop your leg loops from sliding down at the back. They can be adjusted too.

Leg Loops
These fasten around the top of your thighs.

Belay Loop
This super strong loop connects the waist belt to the leg loops. You use it to belay from.

Choosing a Harness

Trying a Harness On

Climbing harnesses are made in different sizes and shapes with different amounts of padding. It's worth going to your local shop and trying some on rather than ordering online.

Select a few harnesses that fit correctly, then hang in them. Good shops will have a facility for you to do this.

The leg loops should hold most of your weight, with the waist belt supporting your upper body so you don't tip upside-down.

Leg Loops

Harnesses either have fixed size or adjustable leg loops. They should fit closely around your thighs without hindering movement.

Adjustable leg loops are useful if you plan to climb in cold environments where you'll need to wear thicker pants, or if the fixed size options just don't quite fit.

Waist Belt

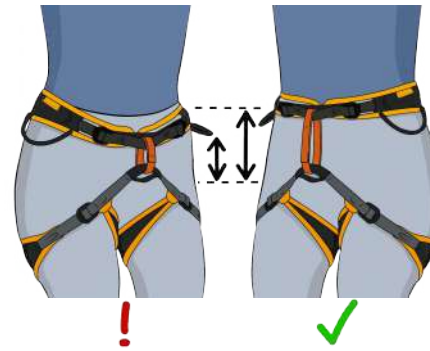
The waist belt should fit around the smallest part of your waist, above your hips.

It needs to adjust small enough to fit tight over a t-shirt, with enough adjustment to get it on easily or wear a jacket underneath too.

The Rise

The rise is the distance between the waist belt and leg loops. Women's harnesses tend to have a bigger rise to fit women's body shapes better.

If the rise is too short, you won't be able to get the waist belt all the way up to the smallest part of your waist.




Sample

Lead Climbing

Lead Climbing: How it Works

* These steps are discussed in more detail later in this chapter.

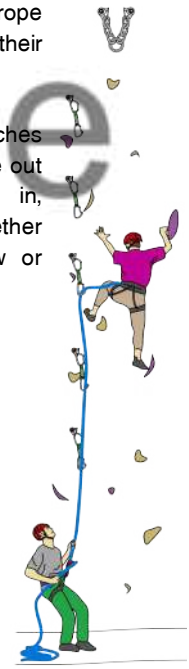
Step 1

The climber ties in to one end of the rope. The belayer attaches their belay device to the rope next to the climber.

Step 2

The climber clips the rope into quickdraws on their way up the climb.

The belayer switches between feeding rope out and taking it in, depending on whether the climber is below or above a quickdraw.

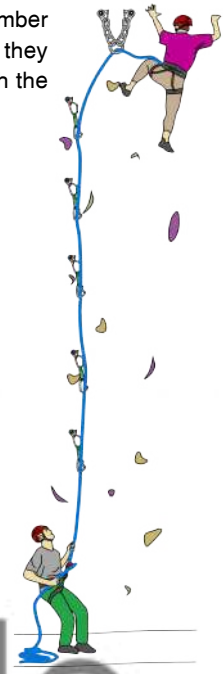


Step 3

If the climber falls, the belayer holds the fall via the rope running through the highest quickdraw.

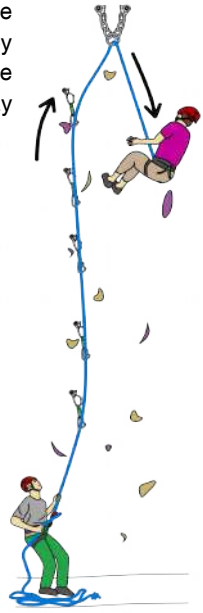
Step 4

When the climber reaches the top, they clip the rope through the top anchor.



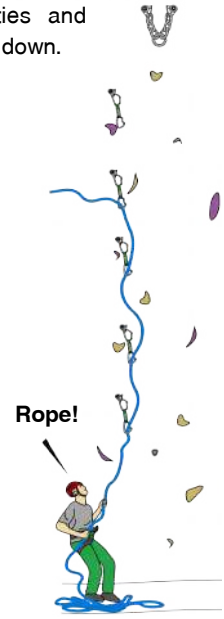
Step 5

The belayer lowers the climber to the ground by letting the rope slide through their belay device under control.



Step 6

The climber unties and the rope is pulled down.



Before You Lead Climb

Before you lead climb, there are two extra things you need to do which you wouldn't do if top roping:

1) Stack the rope
2) Attach quickdraws to your harness

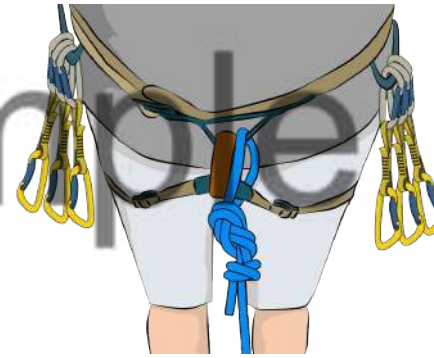
1) Stacking the Rope

You'll need to stack the rope before every lead climb so it will feed out without tangles while you're climbing. Beginning at one end, simply feed the rope into a pile on top of your rope bag, or a clean area of the ground. The climber ties into the top end of the rope.

2) Attaching Quickdraws To Your Harness

Some indoor walls have quickdraws already attached to the wall, but for those which don't, you'll need to bring your own.

Clip half of them to the gear loops on the left side of your harness and the other half on the right side. Clipping them to your gear loops with the bolt-end carabiner will make it easier when you come to use them.



Make sure to bring enough quickdraws with you. You'll need one for each bolt, plus a spare in case a mystery bolt appears that you couldn't see from the ground.

How To Lead Climb

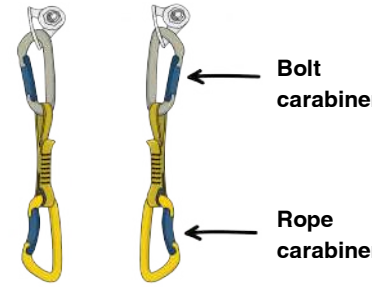
While you are lead climbing, there are four extra things you'll need to do that you wouldn't do if top roping:

1) Clip quickdraws to bolts
2) Clip the rope into quickdraws
3) Clip the rope through the top anchor
4) Pull the rope down when you finish

1) Clipping Quickdraws To Bolts

If the quickdraws are not already attached to the wall, you'll need to clip your own to the bolts.

Simply clip the bolt-end of your quickdraw to the bolt in the wall. It doesn't matter which way it faces, but make sure it is hanging neatly.



2) Clipping the Rope into Quickdraws

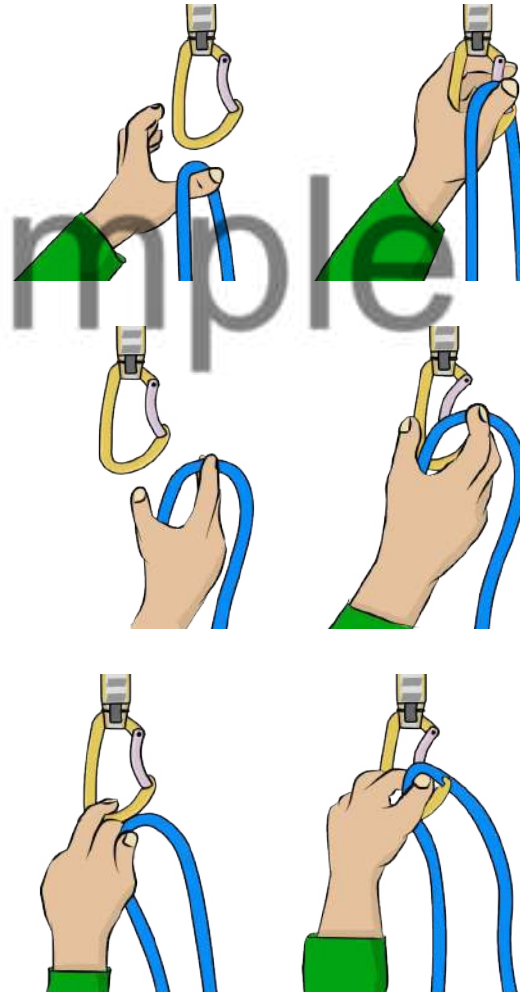
The easiest way to clip a quickdraw is to place your fingers around the back bar of the carabiner, then use your thumb to flick the rope through the gate.

The pressure of you pushing the rope on to the gate will open it — you don't need to open it with your fingers.

If you're clipping with your other hand, you'll need to hold the back bar with your thumb and use your fingers to flick the rope through instead.

Another way is to steady the carabiner with your middle finger and then flick the rope through with your thumb.

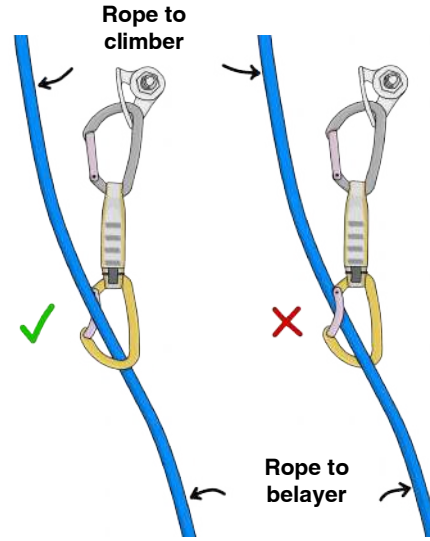
Practise these three techniques at ground level before heading up a route. Make sure you're comfortable clipping quickdraws with both hands, in either direction.



Warning! Back-Clipping

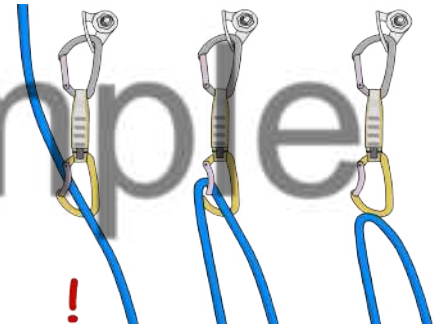
The rope needs to be clipped through the quickdraw so that the end of the rope attached to you comes out of the front side of the quickdraw.

If you fall, the rope will stay clipped through the carabiner.



If you clip it the wrong way (known as back-clipping), the rope could snap through the carabiner's gate during a fall. This would unclip the rope from the carabiner.

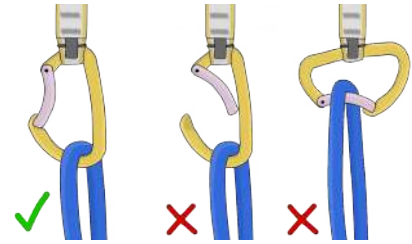
When belaying a leader, keep an eye out for them accidentally back-clipping, and let them know if they have!



Warning! Cross-Loading

A carabiner is cross-loaded when it is loaded sideways. This makes the carabiner much weaker, meaning that it could break during a fall.

Also make sure the carabiner's gate has snapped shut after you've clipped the rope through it. If it stays open, the rope could easily fall out.



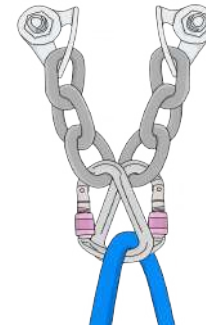
3) Clipping the Rope through the Top Anchor

Once you get to the top of the wall, you'll need to clip the rope through the top anchor.

Different walls have different systems for this — some have two snapgate carabiners, some have one or two screwgate carabiners that you'll need to unscrew first. Ask one of the staff before leading if in doubt.

It's important to make sure that the anchor you clip does not have another rope already running through it. Having two ropes through the same anchor can damage them.

Once you've clipped your rope through the top anchor, you can be lowered down in the same way as if you were top roping.



However, if you've attached your own quickdraws on the way up, you'll need to collect them on the way down.

Simply lower down, unclipping them from both the bolt and rope, and then clip them back to your gear loops. The belayer will need to stop lowering you at each bolt so you have time to do this.

4) Pulling the Rope Down

Untie any knots from the rope before pulling it down. Shout 'rope' before it falls so everyone around you is expecting it — a falling rope in the head hurts!

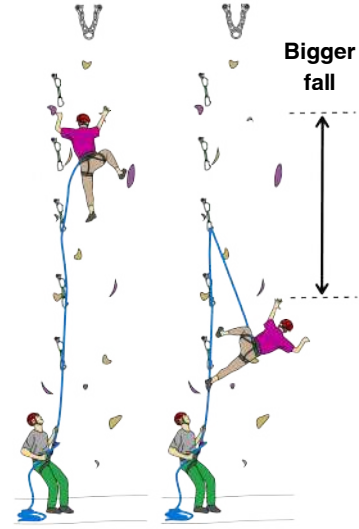
Pull the rope so the falling end drops down through the clipped quickdraws. This will slow it down and make it safer.

Understanding Fall Potential

Leading for the first time can be pretty scary. Suddenly you're exposed to much greater consequences than you would be with the security of a top rope. If you fall, your chances of hitting something (such as a large hold) are increased. The belayer and leader should work together to keep the leader's fall potential to a minimum.

If you fall while next to a quickdraw which you've just clipped, the fall will be short.

But if you fall when above the last quickdraw, you'll take a bigger fall. This may be further than you think as the rope stretches to absorb the force of the fall.



It's important not to clip quickdraws too soon. It can be tempting to pull through meters of rope to clip way above your head. But doing this means there's a lot of slack rope in the system so you'll fall a lot further if you slip while trying to clip.

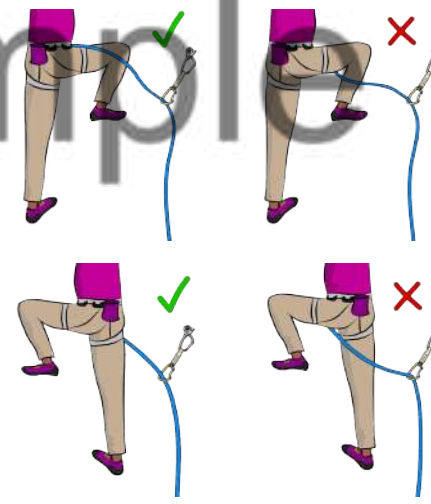
Instead, wait until the quickdraw is between your shoulders and waist, then clip it. This reduces the distance you could potentially fall. It is also less strenuous and quicker.

Obviously, if you fall before clipping the first quickdraw, you'll land back on the ground.

Where To Position the Rope

When lead climbing above a quickdraw, make sure the rope is running to the side of your legs.

If you fall with the rope around your leg, it can flip you upside down, causing you to hit your head on the wall and get 'rope burn' behind your knee.



Lead Climbing: Top Tips

- Try to clip from a resting position, if possible. It's much easier to clip a quickdraw while you're hanging from a big hold on a straight arm than hanging from a tiny hold on a bent arm.

- After a big lead fall, let your rope 'rest' for five minutes to recover its elasticity. If you get straight back on the wall and then fall immediately, the fall will be more abrupt and less comfortable.