The conformation of a racehorse essentially means how well he is put together in order to accomplish the task he was bred to do - run fast. Conformation is the blending of the various body parts, and how well they fit together visually and physically to create a running machine. If you were to look at Michael Jordan standing next to Rosanne Barr, you could instantly determine which person had the better conformation to excel at playing basketball. Its never that obvious with horses, but to a trained eye with many years of experience, the differences between a potentially great horse and an average horse can be seen.

The Thoroughbred's conformation makes it an ideal runner, capable of covering more than twenty feet in a single stride while reaching speeds of up to forty miles per hour. The rear legs act much like springs as they bend and straighten during running. This tremendous "spring power" helps thrust the horse forward as its front legs provide "pull." The Thoroughbred's head and long neck also help to make running smooth and rhythmic. The neck moves in synchrony with the forelegs, aiding in forward motion and extending the "arc of flight," the time the Thoroughbred literally is airborne.

Every horse has some physical fault with regard to pedigree and conformation. The art of picking a horse out at auction or in the paddock is determining which physical characteristics will have an impact on the horses ability to race. Looking at the pedigree of the horse can provide clues to faults that may have been passed down from generation to generation, and whether or not those faults impact the horse on the racetrack. THE AVERAGE THOROUGHBRED RACEHORSE The "average" thoroughbred racehorse stands 16 hands tall (64 inches or 4 inches per hand measured to withers - see below), and weighs about 1,000 lbs. The heart of the thoroughbred is about as big as a volleyball and usually weighs about 10lbs. The massive heart of the racehorse can pump up to 75 gallons of blood per minute during a race. Secretariats heart weighed an astounding 22 pounds! The average horse can run at speeds of 35 to 40 mph. The stride of the thoroughbred racehorse is approximately 20 feet long and they can take up to 150 strides per minute! BALANCE When evaluating a horse, the first thing to look for is balance. Do the neck, back and hip appear to be of equal length and be well proportioned? Does the horse’s frame carry his muscle mass well? Too much muscle on a little frame or too little on a big one can cause some problems. HEAD The eyes should be big and intelligent, not sunken or bulging and not too close together. The nostrils should be big to allow for serious air intake to fuel the body. Ears should be alert, pointing, and moving in all directions. Is the horse alert and aware of what's going on around him, does he appear in control and confident?
SIDE VIEW Feet - A horse's hooves must be able to withstand a great deal of pressure. Consider proportion, substance, and size of the hoof. The underside of the hoof should have a round, slightly oval shape with some depth. Some believe that larger feet indicate an aptitude for turf. Pasterns - The pastern should be at a 45-degree angle. Its length should be proportionate - too long a pastern could indicate weakness and tendon strain, while if too short it may absorb too much concussion thus stressing the bone structure. Ankle - As with the pastern, the ankle joint size should be proportionate to the rest of the leg. Cannon Bones - Ideally, the cannon bone should be short, strong and have mass. Knee - Bones in and leading to the knee should line up in a balanced manner - not tilting forward (“over at the knee”) or back (“back at the knee”). Shoulder - The shoulder should have the same slope or angle as the pastern. Stride length is largely determined by the shoulder. Neck - A horse's neck should be sufficient in scope so as to provide adequate wind for the horse, and be well tied in at the withers, while not being too low or "ewe necked". In short, does the neck fit the rest of the body? Head - Nostrils should be of adequate size. The head should be broad enough to permit adequate air passage. Generally, the distance from the back of the jaw to where the head ties into the neck should be about the size of a fist. Eyes - The eyes should be big and bright. Look for an "intelligent," keen, alert eye. Back - The distance from the withers to top of croup or hips should match the length of the horse's neck from the poll to the withers. Hip/Buttocks - The croup or hip should have a gentle slope - not too steep or flat. The gas kin should depict strength. Hocks - A horse's hocks should not be straight as a post, nor curved so deeply as to be sickle hocked, or behind the body like a German Shepherd Dog. The horse should be standing balanced and straight.

FRONT VIEW Feet - Look for balanced feet on both sides and symmetry. Avoid misshapen, dished, or cracked feet. Cannon Bones - From the front, the cannon bones should appear straight and of the same length. Knees - It is best if the knees are set squarely on the top of the cannon bones, not off to one side or another - "offset knees." Chest - A horse's chest should be broad, and appear powerful. Narrow chests or slab-sided horses are said to lack power. Shoulder - Look for balance and symmetry. Rear VIEW Hocks - From the rear, the hocks should appear to point straight at you, and not turn in or out -- "cow hocks." Hip/Buttocks - Note that much of the animal's athleticism and power comes from behind. Definition and development are key attributes. Front/Rear view - The horse should move straight toward and away from you. Observe whether the horse toes-in or toes-out as it walks. Side view - Check for the overstep, meaning do the hind feet reach beyond the front hoof prints? Observe the horse's head. Be certain it does not bob unusually when walking as this may indicate soreness or lameness. Walk - Look for a smooth long stride.