

from where	Sartorius muscle	Iliacus muscle (illiopsoas)	Psoas major muscle (Iliopsoas)	Pectineus muscle	Quadriceps femoris muscle
Origin	Anterior superior iliac spine.	<ul style="list-style-type: none"> - Iliac fossa within the abdomen. - Iliac crest, iliac fossa, ala of sacrum 	<ul style="list-style-type: none"> - Roots of transverse processes , sides of vertebral bodies , &intervertebral discs from 12th thoracic to 5th lumbar vertebra. - Sides of T12-L5 vertebrae and discs between them; transverse processes of all lumbar vertebrae 	Superior ramus of the pubis.	
Insertion	Upper part of the medial surface of the tibia.	Lesser trochanter of the femur.	Lesser trochanter of the femur together with iliacus muscle.	<ul style="list-style-type: none"> - Upper end of the Linea aspera below the lesser trochanter. - (Pectineal line of femur) 	
Nerve supply	Femoral nerve.		<ul style="list-style-type: none"> - Branches from lumbar plexus. - Ventral rami of L1-L3 	Femoral nerve(occasionally obturator nerve).	
Action (function)	<ul style="list-style-type: none"> 1- Flexion, abduction &Lateral rotation of the hip joint 2- Flexion,& medial rotation of knee joint 	Flexion of the thigh on the trunk (Flexion of thigh at hip)		<ul style="list-style-type: none"> 1- Flexion & adduction of thigh at hip joint. 2- medial rotation of thigh 	

from where	1. Rectus femoris	2. Vastus lateralis	3. Vastus medialis	4. Vastus intermedius	5. Articularis genu
Origin	<ul style="list-style-type: none"> - Straight head from anterior inferior iliac spine. - Reflected head from the ilium above the acetabulum 	Intertrochanteric line ,base of greater trochanter, linea aspera	Intertrochanteric line, linea aspera.	Anterior&lateral surfaces of the shaft of the femur	is muscle fibres attached to the synovial membrane of the knee joint
Insertion	Quadriceps tendon & patella	Quadriceps tendon & patella. Some fibres inserted into capsule of the knee joint.	Quadriceps tendon & patella The lowest fibres are horizontal in direction ,& attached directly to the patella preventing its lateral dislocation.	Quadriceps tendon & patella	
Nerve supply	Femoral nerve.				
Action (function)	<ul style="list-style-type: none"> 1- Powerful extensor of the knee joint. 2- The rectus femoris also flexes the hip joint. 3- The lower fibres of the vastus medialis stabilize the patella 				

From where	FEMORAL NERVE
Origin	Is the largest branch of the femoral plexus (L2,3 and4).
Course	<ul style="list-style-type: none"> - It emerges from lateral border of psoas muscle within the abdomen & passes downward in between psoas & iliacus. -It lies behind fascia iliaca. -Enters thigh lateral to the femoral artery & femoral sheath behind the inguinal ligament. (outside the femoral sheath)
Termination	1½ inch (4cm) below the inguinal ligament, it terminates by dividing into anterior & posterior divisions.
motor Supply	Muscles of anterior compartment of the thigh.
BRANCHES	<ul style="list-style-type: none"> 1- Muscular: Muscles of anterior compartment of the thigh 2- Articular: to the knee and hip joints. 3- Cutaneous: <ul style="list-style-type: none"> -Intermediate cutaneous nerve of the thigh. -Medial cutaneous nerve of the thigh. - Saphenous nerve: descends on the medial side of the knee joint and the medial side of the leg then anterior to the medial malleolus and passes on the medial side of the foot reaching the metatarsophalangeal joint of the big toe.