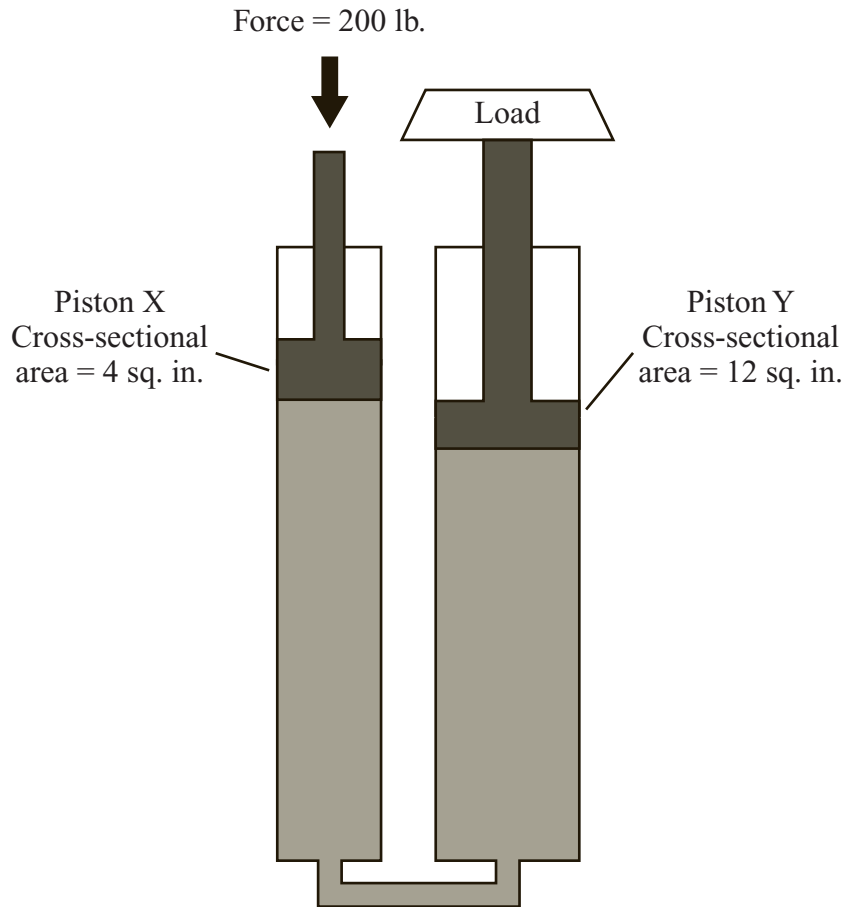


A hydraulic system is represented below.



A force of 200 lb. is applied to piston X and a load is placed on piston Y.

- Calculate the pressure exerted by piston X on the hydraulic fluid. Show your calculations and include units in your answer.
- What is the pressure that the hydraulic fluid exerts on piston Y? Explain your answer.
- What force is exerted on piston Y to support the load? Show your calculations and include units in your answer.
- If piston X moves down 3 in., what distance does piston Y move up? Include units in your answer.