PULLEYS AND LIFTING

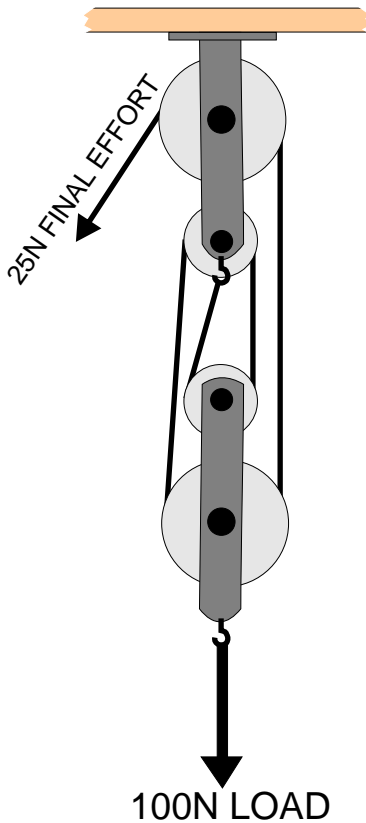V.Ryan © 2000 - 2010

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This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet .

25N FINAL EFFORT

100N LOAD

The pulley system opposite has 1:4 ratio (effort : load). An effort of 25N can lift a load of 100N.

1. Draw a pulley system that is capable of lifting a load of150N, with the effort still being 25N
2. Work out the velocity ratio, the mechanical advantage and the efficiency of the system.

ANSWER

VELOCITY RATIO

MECHANICAL ADVANTAGE

EFFICIENCY