

# PULLEYS AND LIFTING

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On behalf of The World Association of Technology Teachers

## W.A.T.T.



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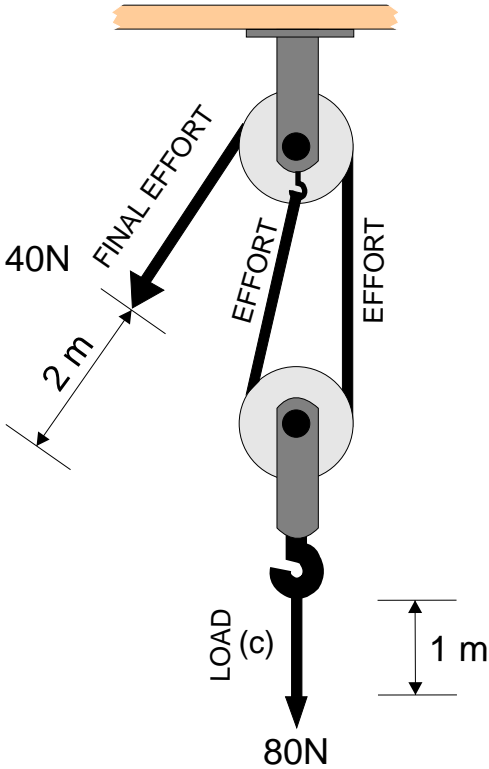
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# PULLEYS AND LIFTING - QUESTIONS

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1a. A simple pulley system is shown opposite. A 40N effort is used to move a 80N load. The final effort moves 2 metres and at the same time the load moves 1 metre.

Calculate the mechanical advantage and velocity ratio.



1b. Work out the efficiency of the pulley system.

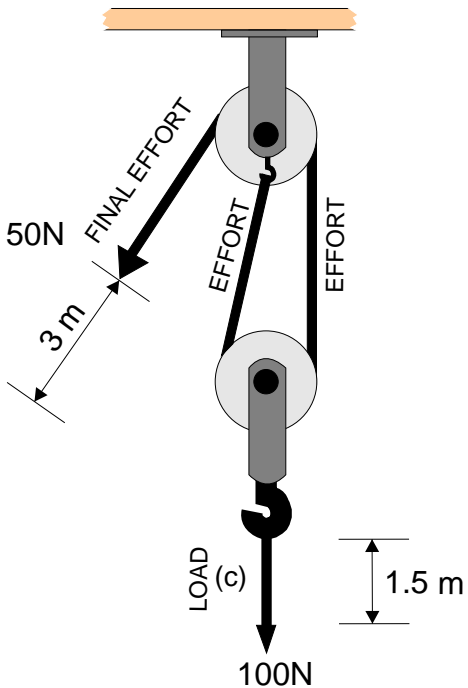
2. Why are pulley systems never 100% efficient?

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3. Work out the mechanical advantage, velocity ratio and efficiency of the pulley system shown opposite.



MECHANICAL ADVANTAGE=

VELOCITY RATIO =

EFFICIENCY =