

CARVING WITH A WATER JET

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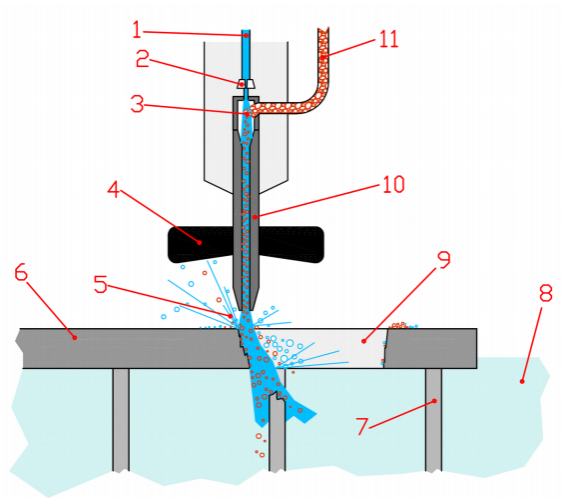
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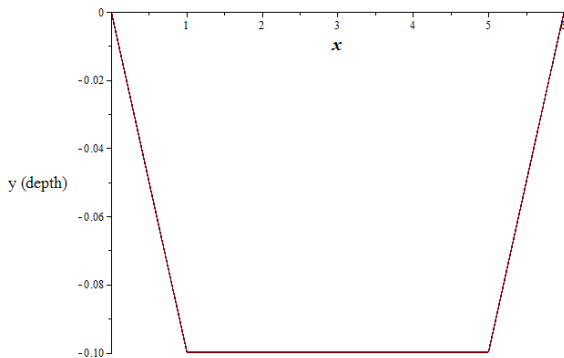


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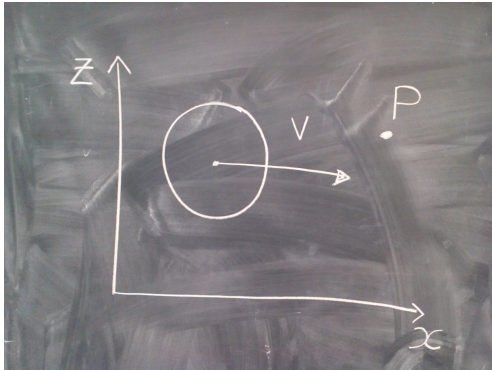


Water jet carving a flat piece of steel.

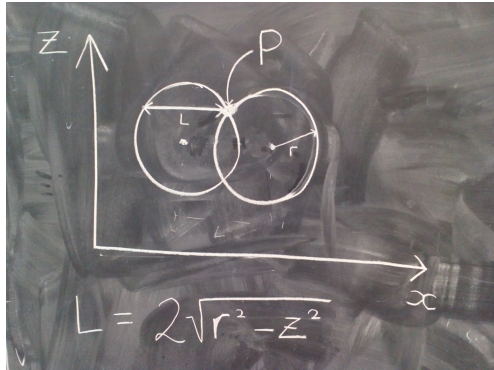
Carving depth in the x-y plane



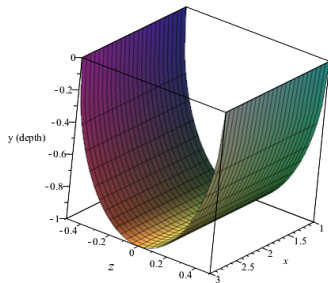
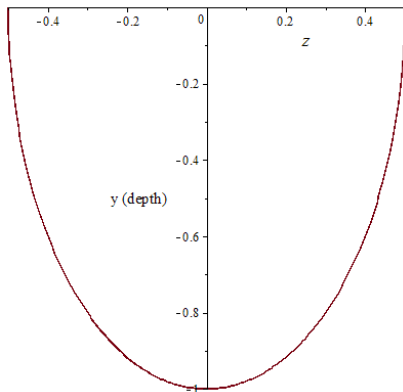
Water jet moving at constant velocity



Water jet moving at constant velocity through point P

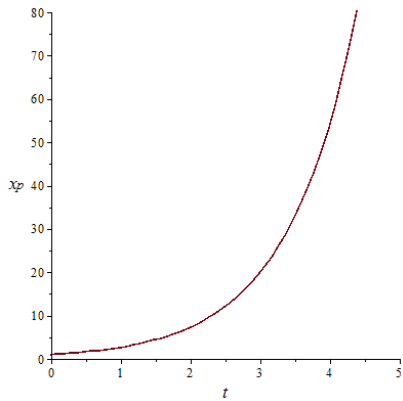
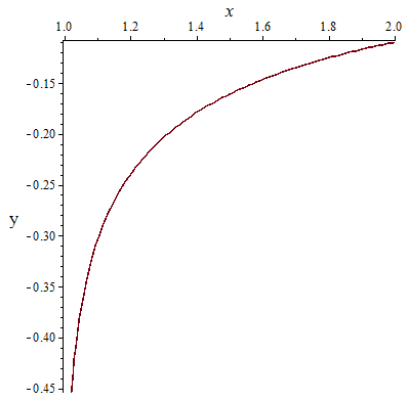


Surprising result



$$y^2 + az^2 = ar^2 \quad (1)$$

Now it gets worse..



$$x_p(t) = e^t \quad (2)$$

Reality check!

Questions?