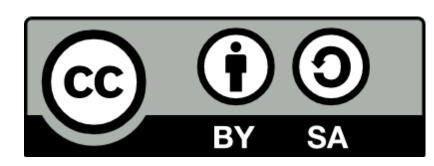


Filling vessels



This material is provided by the <u>FunThink team</u>, responsible institution: Ludwigsburg University of Education

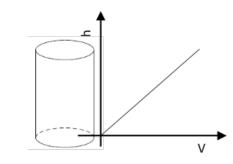
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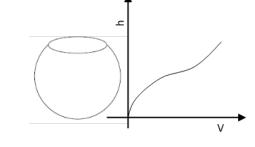


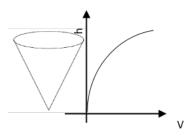


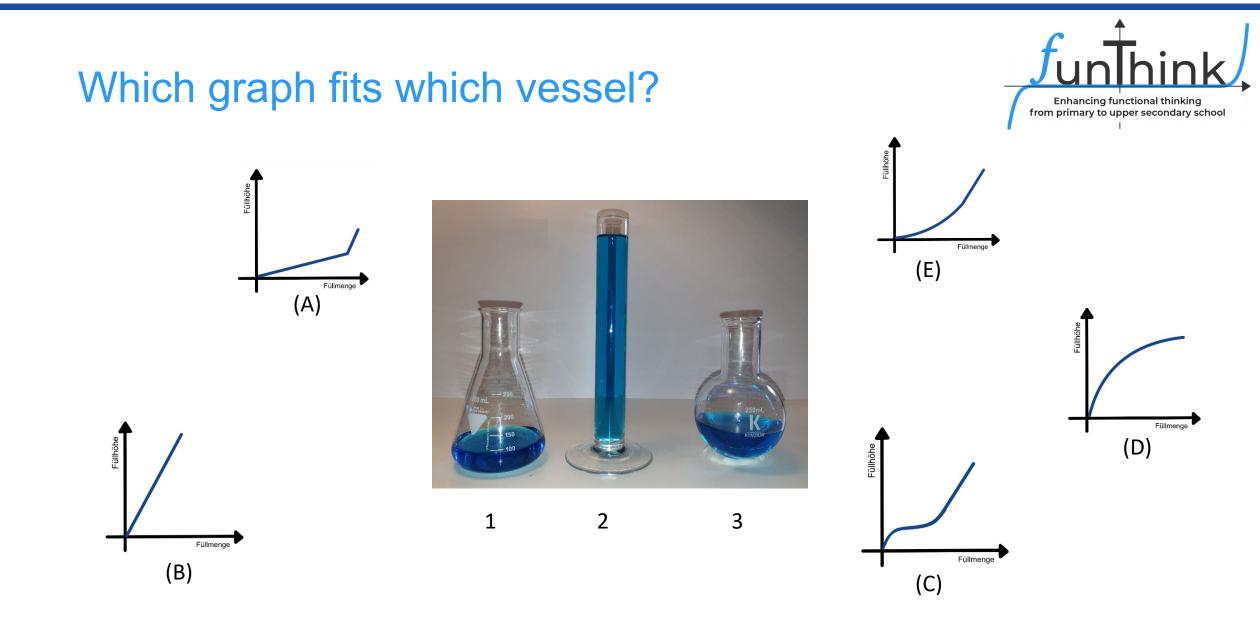
Filling vessels







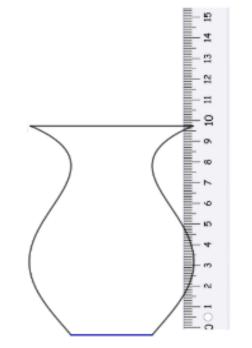




Research assignment





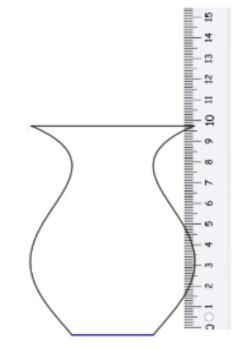


Version A

Research assignment





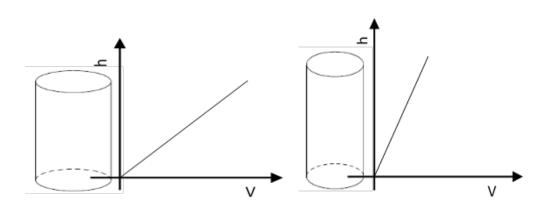




Research finding "Filling vessels"



Vessels and corresponding graphs



Finding:

With increasing width of the vessel, the vessel fills <u>slower</u> and the corresponding graph is

flatter

If the shape of the vessel changes, the graph also changes.

Research finding "Filling vessels"

Finding:

The faster the filling height changes,

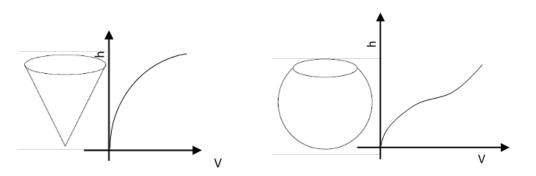
the <u>narrower</u> is the vessel in this

area.

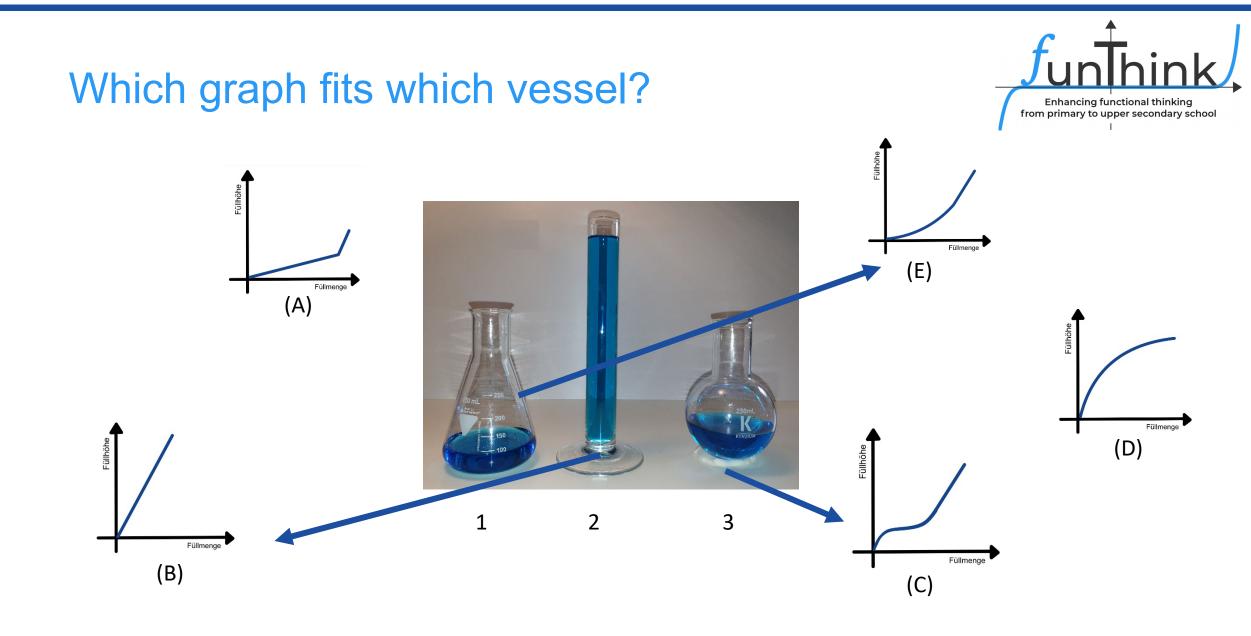
The corresponding graph runs

steeper

Vessels and corresponding graphs

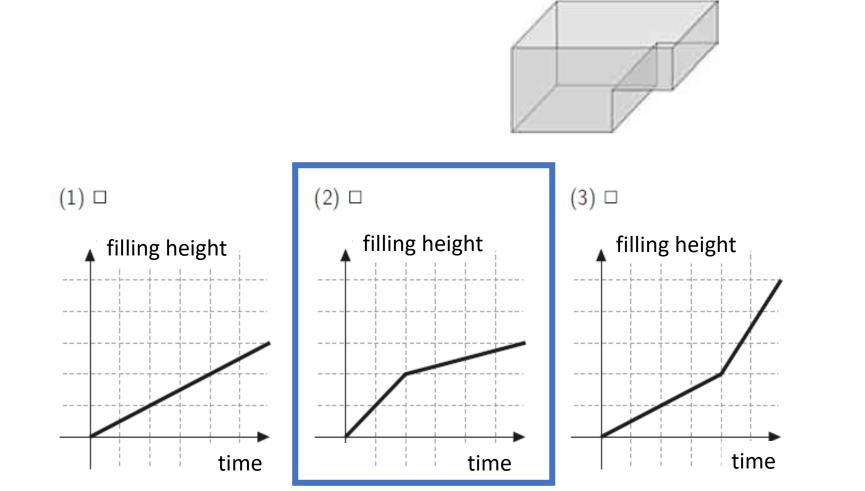






A. Water is let into the pool at an even speed. Which of the graphs shown matches this?

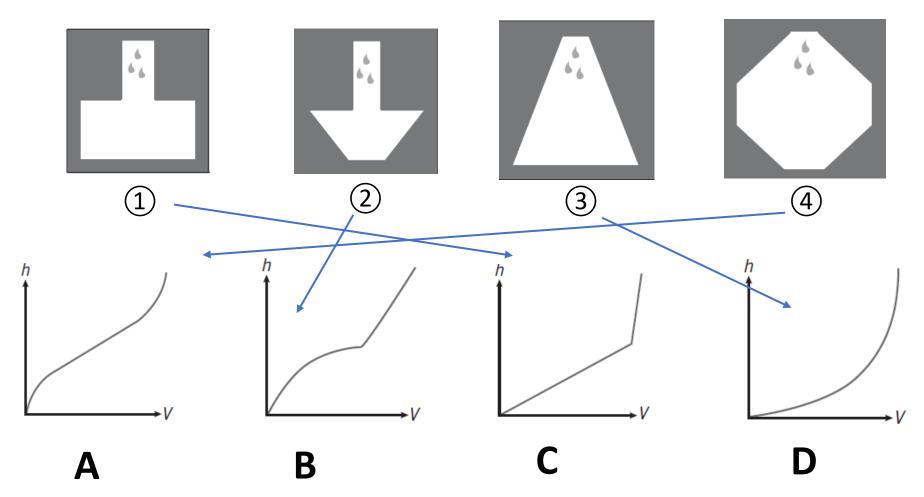




Barzel, B., Glade, M. & Klinger, M. (2021). Algebra und Funktionen. Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-61393-1

B. Which graph matches the vessel?





Kempf, H. (2015). Füllgraphenmemory: Eine Spielidee zur Untersuchung funktionaler Zusammenhänge. Mathematik 5-10(30), 28–29.













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