Congratulations! You passed!

TO PASS 80% or higher

Keep Learning

GRADE 100%

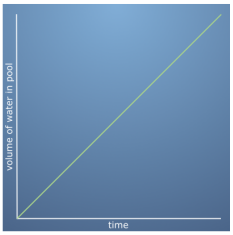
Matching functions visually

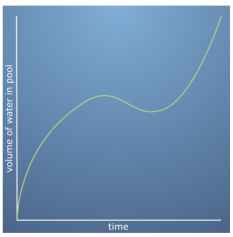
TOTAL POINTS 5

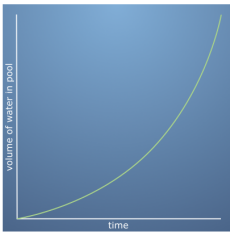
1. In this quiz you will get a refresher in functions - in particular, matching a description of a function to the graph of the function. 1 / 1 point

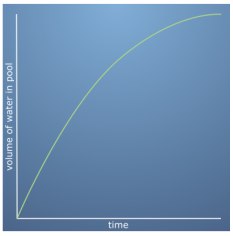
Imagine that you place one end of a water hose into a swimming pool and turn the tap on at the other end. Water then pours into the pool *at a constant rate*, causing the volume of water in the pool to increase at a constant rate.

While the swimming pool is still filling up with water, what would we expect the plot of the function of volume of water in the pool with respect to time to look like?









Correct

Well done! As water flows in at a constant rate, the volume increases at a constant rate, so the graph is just a straight line.

2. Jessica makes a cup of tea but gets distracted writing her code, and forgets to drink it. 1 / 1 point

The tea is left to cool down. The speed of cooling depends on the temperature of the tea: when it is hot it cools down quickly and as it gets colder it cools down *more and more slowly*, until it approaches room temperature.

Which of the following graphs could represent the temperature of that cup of tea with time?