

Before Class

A tank of water currently has 10 gallons of water. A hose pumps in water at a constant rate of 5 gallons per minute. We want to model the amount (in gallons) of water in the tank after  $t$  minutes as a linear function  $f(t) = \_t + \_$ .

- How much water is in the pool after 0, 1, 2, and 3 minutes?
- Read Example 9 on page 48 and see how it is similar to our situation.
- Try to write a linear function  $f(t) = \_t + \_$  to fit the data for the water in the tank.

During Class

- p. 51, # 1, 3, 15, 72, 77, 85 (sketch 1, 3, and 15 by hand)

Notes

- Khan Academy has lots more videos about linear functions if you're bored:  
<https://www.khanacademy.org/math/algebra/algebra-functions>.