

## Problem 1

A monopoly faces a demand with a constant elasticity of  $-4$ .  
The price of its product is 150.

- a) What are monopoly's marginal costs at the current output?
- b) Can we say what would happen to the price of monopoly if the elasticity changed to  $-3$ ? Can we say what would happen to the markup above marginal costs?

## Problem 2

A train operator has a monopoly on a track from A to B.  
The elasticity of demand at the current price is  $-0.8$ .

- a) Does the monopoly maximize profit?
- b) Is it possible that the monopoly maximizes profit if it has a quantity subsidy?

## Problem 3

The price of a drug increases after its patent expires  
and generic equivalent enter the market.

Can you explain this using price elasticity?