Price Elasticity of Demand

Joe and Henry, both eight year old, are running a lemonade stand. They sell glasses of lemonade for 10 cents each and every day they sell about 20 glasses and make about $2. One day, Henry thinks "Why not double the price of a glass of lemonade and we will make $4 dollars a day instead of $2!" Joe agrees, and the nest day they raise the price of a lemonade to 20 cents. But at the end of the day Joe and Henry discover that they have only sold 12 glasses of lemonade, which leaves them with only $2.40 – more than $2, but not as much as they had hoped. What happened?

Price elasticity of Demand: *the percentage decrease in quantity that results from a 1 percent increase in price.*

What is the price elasticity of demand in the previous example?

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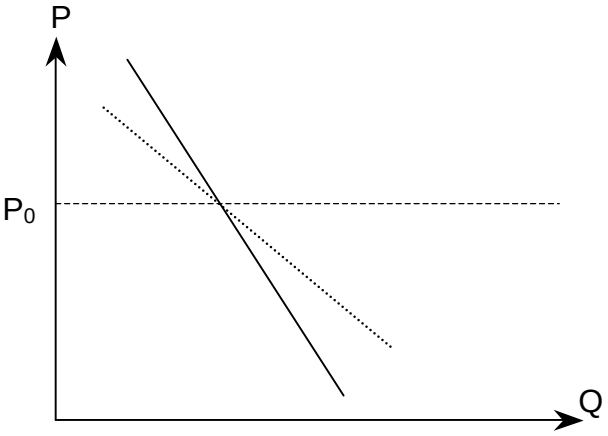
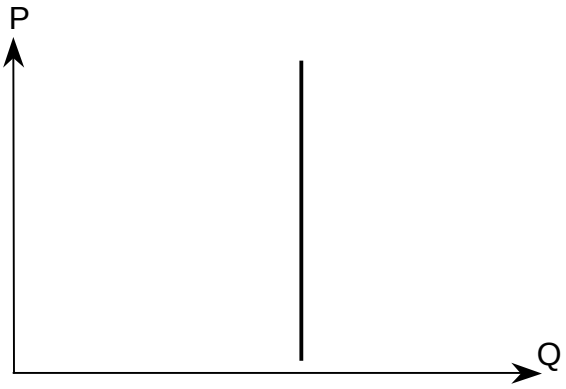
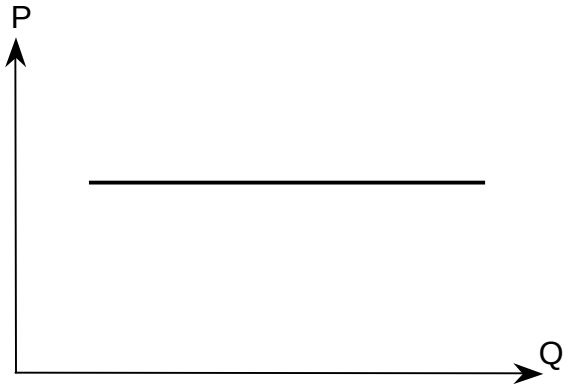


For the price P_0 which demand curve has the higher elasticity?



What is the elasticity in this case?



What is the elasticity in this case?

If the price of a good is \$2.00 and the quantity is 200, and $\varepsilon_d = 0.2$ what happens to quantity demanded if the price goes up to \$2.20?

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Revenue is equal to price times quantity. R=p x q

If the price of a good is \$100.00 and the quantity is 100, and $\varepsilon_d = 0.2$ what happens revenue if the price goes up to \$101.00?

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If the price of a good is \$100.00 and the quantity is 100, and $\varepsilon_d = 1$ what happens to revenue if the price goes up to \$101.00?

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What if the $\varepsilon_d = 4$?_____

What can we say about revenue if $\varepsilon_d > 1$? _____
What can we say about revenue if $\varepsilon_d = 1$? _____
What can we say about revenue if $\varepsilon_d < 1$? _____