



FLICKS

Which movie rental service should you choose?

name _____

date _____

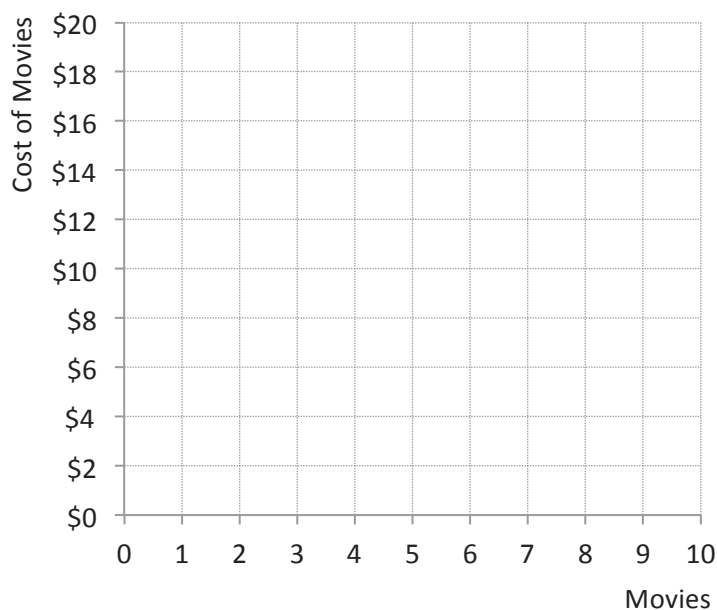
Act One: *The Big Three*

- 1 Redbox, Apple TV, and Netflix are three of the most popular movie rental services in the United States. If you only cared about price, how would you decide which service to use? (Please be as specific as possible.)

| Redbox (DVD) | Apple TV (streaming) | Netflix (streaming) |
|--------------|----------------------|-----------------------------|
| \$1.20/movie | \$5/movie | \$9/month, unlimited movies |

- 2 For each plan, write an equation to calculate the **cost of renting m movies** and graph these equations below. How could you use the graphs to determine which service to use, and is this what you expected from before?

| Redbox (DVD) | Apple TV (streaming) | Netflix (streaming) |
|--------------|----------------------|---------------------|
| | | |





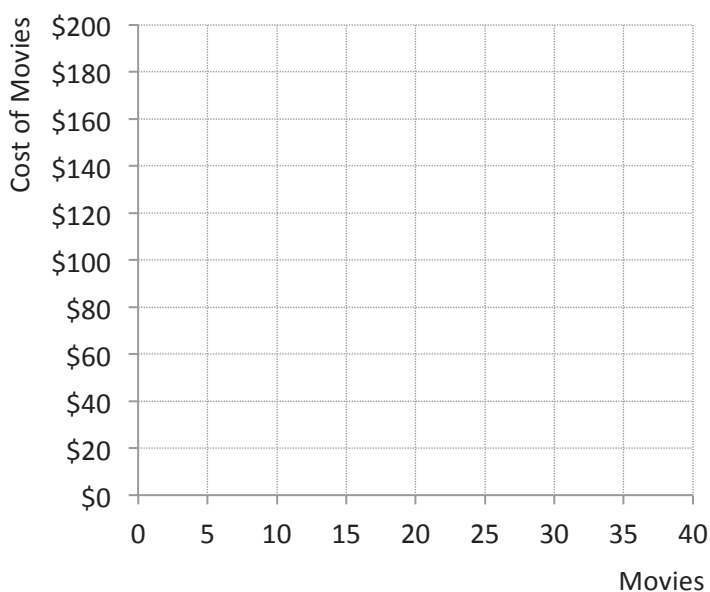
Act Two: Fixed Costs

- 3 In addition to the advertised prices, there are other factors to consider. For instance, each service may require special equipment. Also, Redbox's price is \$1.20 per movie *per day*, and Redbox reports that, on average, customers keep a movie for two days.

For each service, write an equation to calculate the **total cost to watch movies** over the course of the first year. Assume you only rent one movie at a time, and that you already have a TV and internet service.

| Redbox | Apple TV | Netflix |
|---|-----------------------------|---|
| \$1.20/movie Gas: \$0.50 per movie DVD Player: \$40 | \$5/movie AppleTV: \$100 | \$9/month, unlimited movies Wi-Fi Adaptor for TV: \$30 |
| | | |

- 4 Sketch the total cost for each service on the graph below, and estimate when the different plans cost the same. Then, try to find the exact intersection points algebraically.



| | |
|----------|---------|
| Redbox | Netflix |
| Apple TV | Netflix |
| Apple TV | Redbox |

- 5 In reality, people don't just choose movie rental services based on cost. Why might someone choose a more expensive option, and which movie service would *you* choose? Explain.