

Introduction and Background for the DVD Plan Re-engagement Lesson

Read the following before viewing the video clip:

1. Set up of the lesson (the “hook”) and problem details

- Teacher asked students a series of questions regarding their familiarity with DVDs. Students shared their ideas about borrowing, renting, and buying DVD movies.
- Teacher posted and stated the price plans for Movie Buster, Online Flix, and Mail Flix.

“I would like for us to explore the idea of renting DVD movies. There has been much discussion in the news and other media regarding the economic times in our world today. There is a lot of concern and attention being given to how people spend their money. So if we are trying to make educated decisions about how we spend our money, then we should look into more than one DVD rental plan before we begin spending our money to rent movies. By comparing different plans we can find the best way to get the most out the money we spend. Right now we are going to compare DVD prices, but as you get older you will be able to make better financial decisions if you continue to compare the prices of items you are interested in purchasing (cost analysis).”

Rental Plan Name	Price Plan
Movie Buster	\$3 per rental
Online Flix	\$12 per month plus \$1 per rental
Mail Flix	\$18 per month (unlimited rentals)

- Teacher posed prompt for students to begin investigating.

“Let’s compare the cost of the three different plans. The focus of our investigation will be to determine if the 3 DVD rental plans will ever cost the same amount of money. Please be sure to use verbal and tabular representations to show your comparisons.”

2. Answer teacher expected from students:

# of videos	1	2	3	4	5	6	7
Movie Buster	\$3	\$6	\$9	\$12	\$15	\$18	\$21
Online Flix	\$13	\$14	\$15	\$16	\$17	\$18	\$19
Mail Flix	\$18	\$18	\$18	\$18	\$18	\$18	\$18

3. Teacher had the class consider Student H's work:

	1	2	3	4	5	6	7
Movie Buster	\$3	\$6	\$9	\$12	\$15	\$18	\$21
Online Flix	\$13	\$14	\$15	\$16	\$17	\$18	\$19
Mail Flix	\$18	\$36	\$54	\$72	\$90	\$108	\$126

- Teacher posed the following prompt for discussion:

"Look at Student H's work.

Do these 3 tables make mathematical sense? Why or why not?

Do these 3 tables match the DVD plans for each company?"

View the video clip: <http://www.insidemathematics.org/classroom-videos/public-lessons/7th-8th-grade-math-comparing-linear-functions/problem-1-part-b>

Complete the template while viewing (Handout 2).

Source: Inside Mathematics at www.insidemathematics.org

To view additional segments of the lesson, pre-planning, post-lesson student and faculty debriefs, classroom handouts and student work samples, go to: <http://www.insidemathematics.org/classroom-videos/public-lessons/7th-8th-grade-math-comparing-linear-functions>