

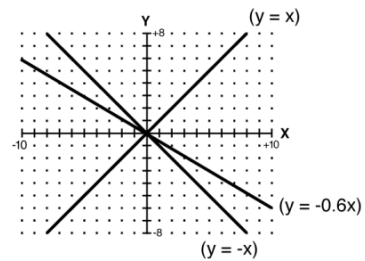
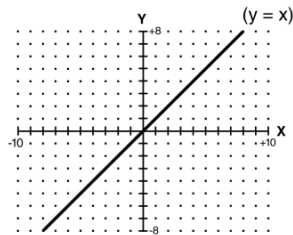
HANDOUTS

COMPARING LINES: The problem

Two students worked on this problem:

They drew two lines

8a. If you change the equation $y=x$ to $y=-0.6x$,
how would the line change?



A. The steepness would change.
Why or why not?

NO YES STEEPER
 LESS STEEP

WATCH VIDEO CLIP USING THESE TWO FOCUS QUESTIONS

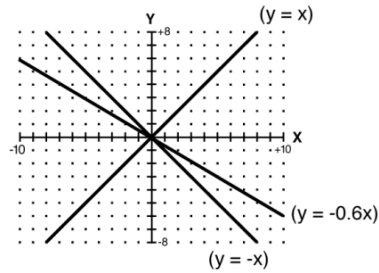
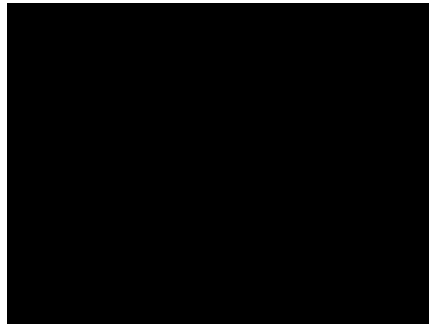
1. What mathematical practices did students use?
 2. What resources did students use?
- Listen and watch carefully
 - Read subtitles
 - When student speaks Spanish, translation is below in parentheses
 - I will read transcript after showing the video clip

COMMON CORE MATHEMATICAL PRACTICES

- 1) **Make sense of problems** and persevere in solving them
- 2) **Reason abstractly** and quantitatively
- 3) **Construct viable arguments** and critique the reasoning of others
- 4) Model with mathematics
- 5) Use appropriate tools strategically
- 6) **Attend to precision**
- 7) Look for and make use of structure
- 8) Look for and express regularity in repeated reasoning

FOCUS ON MPS 1, 2,3, and 6

VIDEO CLIP: COMPARING LINES



TRANSCRIPT: COMPARING LINES

Marcela: No, it's less steeper . . .

Giselda: Why?

Marcela: See, it's closer to the x-axis . . . Isn't it?

Giselda: Oh, so if it's right here . . . it's steeper right?

Marcela: Porque fijate, digamos que este es el suelo,
(Because look, let's say that this is the ground)
entonces, si se acerca más, pues es menos steep.
(then, if it gets closer, then it's less steep.)

Giselda: Oh, I got it. I thought you meant
cual es la diferencia entre esto y el otro, know what I mean?
(which is the difference between this and that one)

Marcela: Pero fijate (But look).

Giselda: But that's not what they want.

Marcela: Yeah! . . . Well, kind of, cause see this one . . . is . . .
está entre el medio de la 'x' y de la 'y,' right?
(is between the x and the y)
This one (the line $y=-0.6x$) is closer to the x than to the y,
so this one (the line $y=-0.6x$) is less steep.