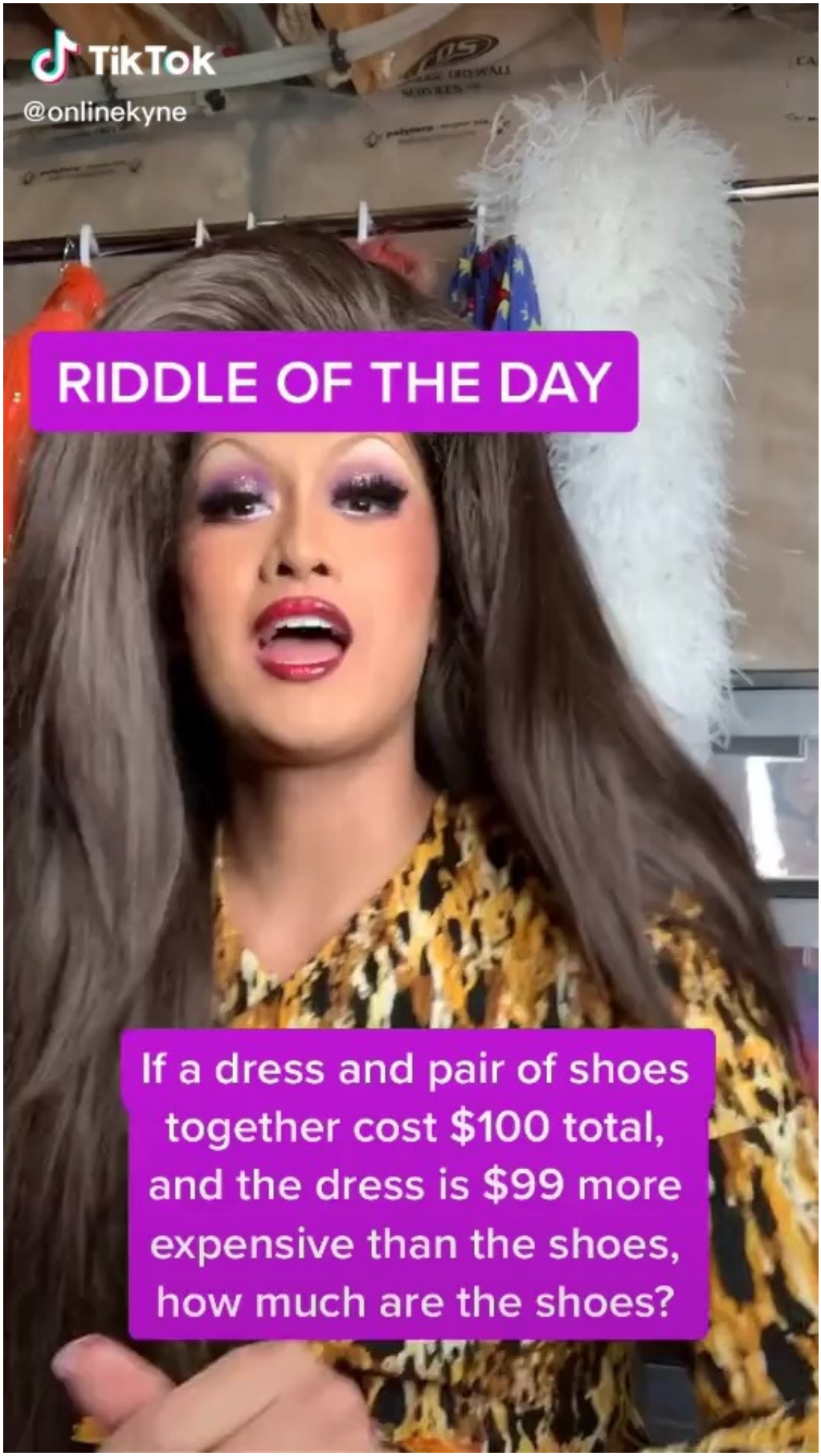


Video source: @onlinekyne TikTok: https://vm.tiktok.com/TTPdUB9WuC/



Suggested Strategy: Be/Convince A Skeptic

Possible Qs to Explore

1. Kyne's posed riddle, as is, "If a dress and a pair of shoes together costs $100 total, and the dress is $99 more expensive than the shoes, how much are the shoes?"
2. How might we represent this problem visually?
3. How might we visualize this problem graphically?
4. How might we represent this problem algebraically?
5. Kyne says, "Why would anyone ever express the price of a dress in such a way?" Then she explains, "Well when was the last time you told a friend you were five minutes away from them, you didn't tell them where you were, you told them where you were in relation to them. Sometimes a question of where you are is actually meaningless. For example, "where is the moon" is a meaningless question. All we know is where the moon is in relation to the earth." When else would it be meaningless to ask where something actually is? What is a scenario in which it would be better to say where something is, in relation to something else? Use that scenario to write your own problem.

Teacher Notes

- This activity might be used as a lesson launch.
- The activity requires that students watch a TikTok video rested by Drag Queen and mathematics communicator Kyne Santos. See page 3 for an intro to Kyne and her work (Kyne uses she/her pronouns while in drag)
- Pause the TikTok video to the left at 15 seconds, right after Kyne poses the question "If a dress and a pair of shoes together costs $100 total, and the dress is $99 more expensive than the shoes, how much are the shoes?" and states that the answer is NOT $1 and $99.
- Introduce students to the skeptics framework on page 3 of this resource (source article linked as well).
- Students will pair up, one of them playing the role of the skeptic and the other the role of the convincer/ explainer.
- The convincer is responsible for explaining why it could not be $1 for the shoes and $99 for the dress and the skeptic is responsible for, well, being skeptical. They might ask questions like: How do you know that works (or doesn't, in this case)? Why did you use that method? can you prove that to us? (These three questions are from p 426 of the article linked to page 3 of this resource).
    - My additions to Qs that the skeptic might ask for this particular situation- Can you say more about _____? But what if_____? If it's not $1 and $99 what could it be? I agree that ____, but I'm still not convinced that ____.
- After the routine/strategy, have various student pairs share how their partner was able to convince them and then see if anyone was able to figure out what the answer was if not $1 and $99. The volunteer should be prepared to convince class skeptics of their solution as well!
- Students can then be asked how this problem would be visualize using multiple representations (Qs 2-4), if that has not yet come up in the previous discussion.
- Once students are convinced and able to use the various representations to convince themselves and a skeptic of the solution, play the rest of Kyne's TikTok video and pose Q5.
- Q5 is an opportunity for students to create their own problems and then repeat the skeptic routine as they explain to their partner *why* it is a similar/appropriate scenario and how to solve it.
- Student problems and solutions can be displayed around the room.

Terminology

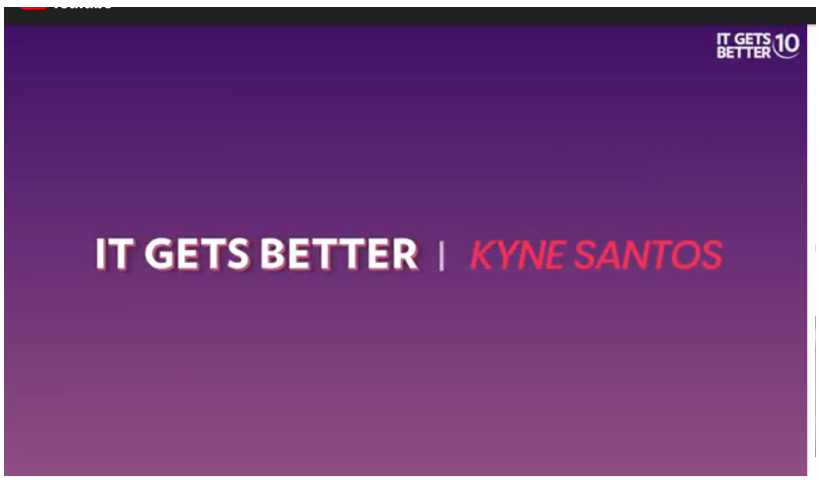
Note: All terminology is directly quoted from Learning for Justice's (2018) *The Acronym and Beyond,* unless otherwise indicated.

Pronouns (*adj.*): The pronoun or set of pronouns that an individual personally uses and would like others to use when talking to or about that individual. Can include variations of he/him/his, she/her/hers, they/their/theirs, among others. [While you may have hear "preferred pronouns" used,] this term is being used less and less in LGBTQ circles, as it suggests one's gender identity is a "preference" rather than innate. Recommended replacement: "Your pronouns, my pronouns, their pronouns, etc."

Drag Queen (*noun*): Drag is an artistic way of expressing yourself and showing the world who you are or who you want to be. Drag queens often express their feminine sides or different aspects of their gender or personality through dressing up, performing, marching in parades, and volunteering in their communities. There are drag queens, drag kings, drag princes, and drag princesses—anyone can be any of the above, regardless of how they identify in everyday life! All that matters is that, when you dress up, you feel comfortable and creative.

- Note: This definition is directly quoted from Drag Queen Story Hour's Website: http://www.dragqueenstoryhour.org/faq/

Who is Kyne Santos? Check out this video (especially towards the end).



Kyne's Video for the "It Gets Better" Campaign: https://youtu.be/ANGtkvXv6w0

Humphrey's Skeptics Framework, as described in https://www.youcubed.org/wp-content/uploads/2019/05/prove-it-to-me-JB.pdf

