

Possible Solutions

Which of the following situations is represented by the inequality below?

$$0.35m + 3 < 0.45m + 1.50$$

- a) An Uber driver charges \$0.45 per mile and an initial fee of \$3. A Lyft driver charges \$0.35 per mile and an initial fee of \$3. When will the cost of using Lyft greater than taking Uber?
- b) An Uber driver charges \$0.35 per mile and an initial fee of \$3. A Lyft driver charges \$0.45 per mile and an initial fee of \$1.50. When will the cost of using Lyft less than taking Uber?
- c) An Uber driver charges \$0.45 per mile and an initial fee of \$3. A Lyft driver charges \$0.35 per mile and an initial fee of \$1.50. When will the cost of using Lyft greater than taking Uber?
- d) An Uber driver charges \$0.35 per mile and an initial fee of \$3. A Lyft driver charges \$0.45 per mile and an initial fee of \$1.50. When will the cost of using Lyft greater than taking Uber?

Possible Solution 1

- When working with inequalities, it is important to understand the relationship between the two sides of the inequality. The symbol in this inequality represents less than. However, the correct answer represents the Lyft driver on the right hand side and that is greater than the Uber which is the left hand side of the inequality.
- Also, the Uber driver charges \$0.35 per mile and an initial fee of \$3, whereas the Lyft driver charges \$0.45 per mile and an initial fee of \$1.50.

- The solution is d) An Uber driver charges \$0.35 per mile and an initial fee of \$3. A Lyft driver charges \$0.45 per mile and an initial fee of \$1.50. When will the cost of using Lyft be greater than taking Uber?