Sarah turned 36 this year.
Her mother is 63.

Consider the situation, then pose some questions.

Some possible questions

1) Have Sarah and her mom's ages been reversible at any point in the past? Will they be reversible again in the future?

2) Think about your own relationship with a parent or a child. Was there ever a similar relationship between your ages?

3) Do "reversed ages" happen for every parent and child?

4) What happens when the birth years have "reversed" numbers (like 1957 and 1975)? Does that make their ages have "reversed" numbers?

Push and Support Cards for Reversed Age Problem

Cut out these cards before class. Share a card with a group of participants only if they need it to keep working productively.

How many times has this happened before for Sarah and her mom?

Will the "reversed ages" happen again for Sarah and her mom?

What patterns do you notice in Sarah's age and Sarah's mom's age over time?

Would this happen with other age differences?

Sarah's age	Age of Sarah's mom
35	62
36	63
37	64

Eric's mom was born in 1942. Eric was born in 1971. Will their ages ever be reversed?

Are there any reversed ages in the room today?

In what situations do "reversed ages" happen?

What would the graph of "reversed ages" look like?

Would the "reversed ages" continue if Sarah's mother lives past 100?

Are there any times in Sarah and her mom's lives when their ages are both square numbers?

How old was Sarah when her *number of months lived* was equal to her mom's *number of years lived*? [Using only whole numbers.]

Thank you, @MathSarahLL, @PatriciaHelmuth, @Rivera_Con, @mtrushkowsky, & @benjamindickman!