## Crossing the river solution

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On one side of a riverbank, there are two 200 lb . adults and two 100 lb . children. They have a rowboat, which anyone can row, but the boat can only hold a maximum of 200 lbs . How will they manage to get everyone across the river using only the rowboat? They can't swim! Can you come up with a solution? (Drawing a diagram can really help here!)

Solution: There is certainly more than one way to get everyone safely to the other side. Here is one option (not necessarily the fastest). Let's write this out in a series of steps and provide diagrams to show a visual for each step.

Here is our initial set up: $200=20016$ adult, $100=10016$ adult, Boat-indicates what 200
 side of the bark the boat is on after each step.

Step 2: One child goes back to the other side bringing the boat back to the adults.


Step 3: One adult takes the boat across the river by themselves.


Step 4: The child on the right bank takes the boat back to the adult and child on the left, leaving only one adult on the right bank.


Step 5: Again, the two children take the boat from the left bank to the right bank.


Step 6: One child takes the boat back to the left bank.


Step 7: The adult on the left bank takes the boat by themselves to the right bank.


Step 8: The child on the right bank takes the boat by themselves over to the left bank to pick up the other child.


Step 9: Lastly the two children take the boat together to join the two adults on the right bank.


