Your tests were not enough!

If I provide
small = 2
big = 3
total = 17

It returns -1, but it should be 2!

- The total is higher than the amount of small and big bars.
  Ex: small = 1, big = 1, total = 10
- Only big bars.
  Ex: small = 5, big = 3, total = 10
- Need for big and small bars.
  Ex: small = 5, big = 3, total = 17
- Only small bars.
  Ex: small = 4, big = 2, total = 3

(2,3,17)

Need for big and small bars.

small = 2, big = 3, total = 17

Hmm, with these inputs, **small = 2** is on the boundary of the required number of small bars!

Boundary Testing

small = 0, big = 3, total = 17, = -1

small = 1, big = 3, total = 17, = -1

small = 2, big = 3, total = 17, = 2

small = 3, big = 3, total = 17, = 2

The total is higher than the amount of small and big bars.
Ex: small = 1, big = 1, total = 10

small = 1, big = 1, **total = 5**, = 0
small = 1, big = 1, **total = 6**, = 1

small = 1, big = 1, **total = 7**, = -1
small = 1, big = 1, **total = 8**, = -1

Only big bars.

Ex: small = 5, big = 3, total = 10

small = 5, **big = 0**, total = 10, = -1

small = 5, **big = 1**, total = 10, = 5

small = 5, **big = 2**, total = 10, = 0

small = 5, **big = 3**, total = 10, = 0

Need for big and small bars.

Ex: small = 5, big = 3, total = 17

small = 0, big = 3, total = 17, = -1

small = 1, big = 3, total = 17, = -1

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small = 2, big = 3, total = 17, = 2

small = 3, big = 3, total = 17, = 2

small = 2, big = 3, total = 14, = -1

small = 3, big = 3, total = 14, = -1

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small = 4, big = 3, total = 14, = 4

small = 5, big = 3, total = 14, = 4

Only small bars.

Ex: small = 4, big = 2, total = 3

small = 4, big = 2, total = 3, = 3

small = 3, big = 2, total = 3, = 3

small = 2, big = 2, total = 3, = -1

small = 1, big = 2, total = 3, = -1