

$[3, 3, 5, 0, 0, 3, 1, 4]$   
 left    0 0 2 2 2 3 3 4  
           $\longrightarrow$   
 right   4 4 4 4 4 3 3 0  
           $\longleftarrow$

max with only 1 transaction.

```

const fn = (prices) => {
  const n = prices.length;
  const left = new Array(n).fill(0);
  const right = new Array(n).fill(0);

  let min = 0; prices[0]
  for (let i = 1; i < n; i++) {
    min = Math.min(min, prices[i]);
    left[i] = Math.max(left[i-1], prices[i] - min);
  }

  let max = 0; prices[n-1]
  for (let i = n-2; i >= 0; i--) {
    max = Math.max(max, prices[i]);
    right[i] = Math.max(right[i+1], max - prices[i]);
  }

  let p = 0;
  for (let i = 0; i < n. i <= n-2; i++) {

```

```
    p = Math.max(p, left[i] + right[i+1]);  
}  
return p;  
}
```

right[i]

buy and sell at the same  
time with different stock  
is valid.