

Student Work and Explanations

① $9 \times 10 = 90$ $10 \times 10 = 100$
 $90 - 100 = -10$

$9 \times 20 = 180$ $20 \times 20 = 400$
 $180 - 400 = -220$

$9 \times 5 = 45$ $5 \times 5 = 25$
 $45 - 25 = 20$

"Guess lower numbers than your opponent."

②

guess	
1	8
10	-10
6	18
3	18

"I'm not sure what I'm looking for."

③ (used a calculator)

- 10 and above will be negative numbers
- below 0 will be negative numbers

T: Is there a best number?

S: eight

④ $(num)^2 - 9(num)$

"just choose a number one more than your opponent."

⑤

$0 = 0$	"It goes up then down again, so 4 and 5 are best."
$1 = 8$	
$2 = 14$	
$3 = 18$	
$4 = 20$	
$5 = 20$	
$6 = 18$	
$7 = 14$	
$8 = 8$	
$9 = 0$	
$10 = -10$	

⑥