

Info Gap: What Was Multiplied?

### Problem Card 1

There are two complex numbers  $(a + bi)$  and  $(c + di)$  whose product is an imaginary number. What are the two complex numbers?

Info Gap: What Was Multiplied?

### Data Card 1

- The product of the two numbers is  $34i$ .
- The real part of  $(a + bi)$  is 4.
- The imaginary part of  $(a + bi)$  is  $-i$ .

Info Gap: What Was Multiplied?

### Problem Card 2

There are two complex numbers  $(a + bi)$  and  $(c + di)$  whose product is a real number. What are the two complex numbers?

Info Gap: What Was Multiplied?

### Data Card 2

- The product of the two numbers is 12.
- The real part of  $(a + bi)$  is 2.
- The imaginary part of  $(c + di)$  is  $3i$ .

Info Gap: What Was Multiplied?

### Problem Card 3

There are two complex numbers  $(a + bi)$  and  $(c + di)$ , and  $(a + bi)^2 = (c + di)$ . What is  $(a + bi)$ ?

Info Gap: What Was Multiplied?

### Data Card 3

- The real part of  $(c + di)$  is -6.
- The imaginary part of  $(c + di)$  is  $8i$ .