

1.

Statement	Variable Values
	m → 143 k → 70
m.transferFrom(k);	
	m → 70 k → 0

2.

The goal of the transferFrom method is to change the variable being transferred the value, and an immutable type cannot be changed.

3.

Statement	Variable Values
private static void swap1(int i1, int i2) {	
	i1 = 7 i2 = 12
int tmp = i1;	
	i1 = 7 i2 = 12 tmp = 7
i1 = i2;	
	i1 = 12 i2 = 12 tmp = 7
i2 = tmp;	

	i1 = 12 i2 = 7 tmp = 7	
}		
Start tracing here		
int x = 7, y = 12;		
	x = 7 y = 12	
swap1(x, y);		
	x = 7 y = 12	

Statement	Variable Values	
private static void swap2(String s1, String s2) {		
	s1 → legends s2 → leaders	
String tmp = s1;		
	s1, tmp → legends s2 → leaders	
s1 = s2;		
	s1, s2 → leaders tmp → legends	

s2 = tmp;		
	s1 → leaders s2, tmp → legends	
}		
Start tracing here		
String x = "legends", y = "leaders";		
	x → legends y → leaders	
swap2(x, y);		
	x → legends y → leaders	

Statement	Variable Values	
private static void swap3(NaturalNumber n1, NaturalNumber n2) {		
	n1 → 41 n2 → 78	
NaturalNumber tmp = n1;		
	n1, tmp → 41 n2 → 78	
n1 = n2;		
	n1, n2 → 78 tmp → 41	

n2 = tmp;		
	n1 → 78 n2, tmp → 41	
}		
Start tracing here		
NaturalNumber x = new NaturalNumber2(41), y = new NaturalNumber2(78);		
	x → 41 y → 78	
swap3(x, y);		
	x → 41 y → 78	