There were two versions of the exam.

In version A, Bianca starts from (3,4).

1. (a) \( x = 3 - \frac{11}{8} t \), \( y = 4 - \frac{1}{4} t \) (b) \( x = -5 + t \), \( y = 3 - \frac{1}{2} t \) (c) 3.2876 seconds after they start.

2. (a) 7.02985 cm (b) 2.8 days from today.

3. 47.4085 years after 2000.

4. (a) \( g^{-1}(x) = 5 - \sqrt{x} + 6 \) (b) \( x = 8 \pm 2\sqrt{3} \).

In version B, Bianca starts from (7,-1).

1. (a) \( x = 7 - \frac{1}{2} t \), \( y = -1 + \frac{3}{4} t \) (b) \( x = 10 + \frac{1}{4} t \), \( y = 5 - \frac{5}{2} t \) (c) 1.55056 seconds after they start.

2. (a) 13.43396 cm (b) 13.5 days from today.

3. 63.7737 years after 2000

4. (a) \( g^{-1}(x) = 8 - \sqrt{x + 33} \) (b) \( x = 10 \pm \sqrt{42} \)