



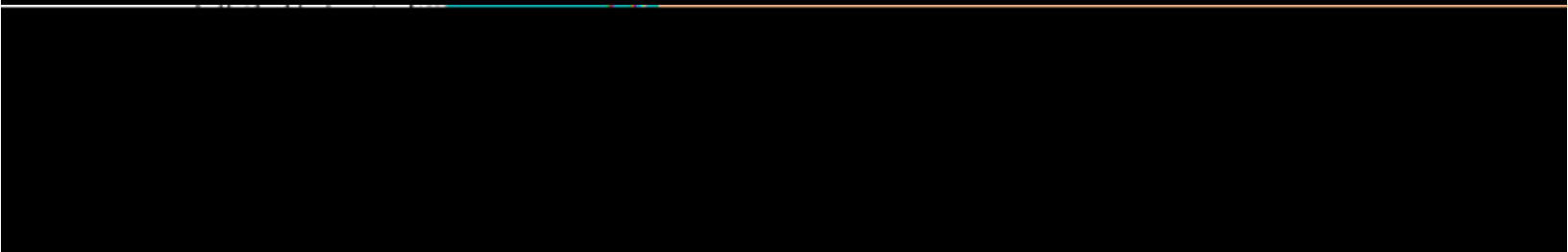
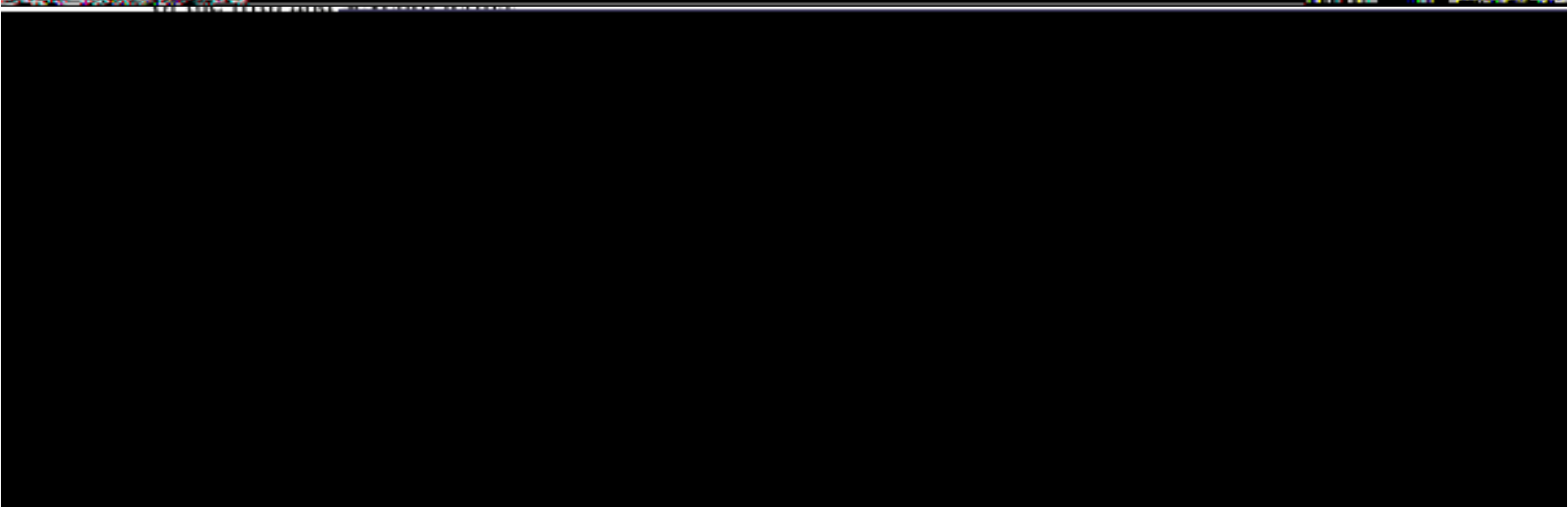
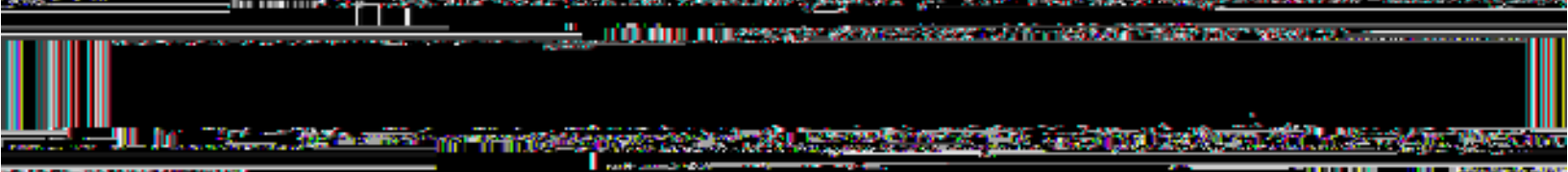
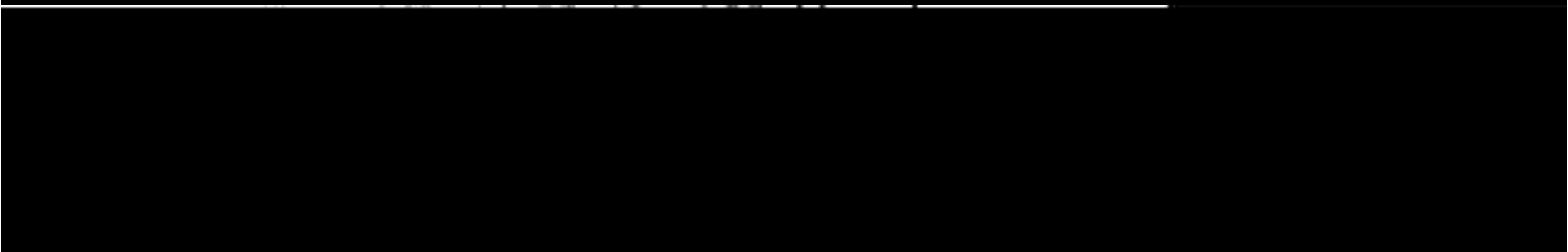
measurement are required. Each problem has the same point-value.

7. Given  $f(x) = 2x^2 - 5x + 3$  and  $g(x) = x^2 - 2x + 1$ , find  $(f+g)(x)$ .

Find the value of  $k$  such that the system of equations  $kx + 3y = 2$  and  $3x + ky = 2$  has infinite solutions. Express your answer in the form  $k = \frac{a}{b}$ , where  $a$  and  $b$  are coprime positive integers. Find the value of  $a + b$ .

the value of  $k$ . Express your answer as an exact decimal.

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Name: \_\_\_\_\_

Team Code: \_\_\_\_\_

2015 Feb QIP M. A. S. I. G.

11. \_\_\_\_\_

1. \_\_\_\_\_

12. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

13. \_\_\_\_\_

4.

14.

5.

15.

7.

17.

8.

18.

