CSE 143X Section Handout #2
Solutions

1.  ```
    -2 + 4 = 7
    4 + -2 = 3
    2 + 11 = 5
    ```

2.  ```
    Many a student in the computer of fred
    Many a computer in the department of major
    Many a department in the honor of fred
    Many a baz in the bar of foo
    ```

3.  ```
    everywhere there had a old
    here macdonald had a there
    there quack had a everywhere
    farm duck had a here
    old macdonald had a farm
    ```

4.  ```java
    import java.awt.*;           // Part (a) solution

    public class SquaresA {
        public static void main(String[] args) {
            DrawingPanel p = new DrawingPanel(300, 200);
            p.setBackground(Color.CYAN);
            Graphics g = p.getGraphics();
            g.setColor(Color.RED);
            for (int i = 1; i <= 5; i++) {
                g.drawRect(50, 50, i * 20, i * 20);
            }
            g.setColor(Color.BLACK);
            g.drawLine(50, 50, 150, 150);
        }
    }

    import java.awt.*;           // Part (c) solution (incorporates Part b)

    public class SquaresC {
        public static void main(String[] args) {
            DrawingPanel p = new DrawingPanel(400, 300);
            p.setBackground(Color.CYAN);
            Graphics g = p.getGraphics();
            drawFigure(g, 50, 50, 100);
            drawFigure(g, 250, 10, 50);
            drawFigure(g, 180, 115, 180);
        }

        public static void drawFigure(Graphics g, int x, int y, int size) {
            g.setColor(Color.RED);
            for (int i = 1; i <= 5; i++) {
                g.drawRect(x, y, i * size / 5, i * size / 5);
            }
            g.setColor(Color.BLACK);
            g.drawLine(x, y, x + size, y + size);
        }
    }
    ```

5.  ```java
    import java.awt.*;

    public class Triangle {
        public static void main(String[] args) {
            DrawingPanel p = new DrawingPanel(600, 200);
            p.setBackground(Color.YELLOW);
            Graphics g = p.getGraphics();
            g.setColor(Color.BLUE);
            g.drawLine(0, 0, 300, 200);
            g.drawLine(300, 200, 600, 0);

            for (int i = 1; i <= 19; i++) {
                g.drawLine(15 * i, 10 * i, 600 - 15 * i, 10 * i);
            }
        }
    }
    ```