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

```java
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);
    }
}
```

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

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

```java
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);
        }
    }
}
```