**Test group**: triangle checker positive test group

**Test object**: function checkTriangle()

**Type of tests**: positive

**Tests**:

1. Test all positive triangle sides handling
2. Test A plus B Triangle sides greater C side handling
3. Test A plus C Triangle sides greater B side handling
4. Test B plus C Triangle sides greater A side handling

**Test group**: triangle checker negative test group

**Test object**: function checkTriangle()

**Type of tests**: negative

**Tests**:

1. Test negative A side handling
2. Test negative B side handling
3. Test negative C side handling
4. Test all sides negative handling
5. Test A plus B Triangle sides less C side handling
6. Test A plus C Triangle sides less B side handling
7. Test B plus C Triangle sides less A side handling

**Test group**: triangle detector positive test group

**Test object**: function detectTriangle()

**Type of tests**: positive

**Tests**:

1. Test equilateral triangle detection
2. Test isosceles triangle detection
3. Test rectangular triangle detection
4. Test ordinary triangle detection
5. Test mixed triangle types detection

**Test group**: triangle detector negative test group

**Test object**: function detectTriangle()

**Type of tests**: negative

**Tests**:

1. Test negative sides triangle handling

**Test group**: triangle basics positive test group

**Test objects**: functions constructor(), getSquare(), getMessage()

**Type of tests**: positive

**Tests**:

1. Test constructor
2. Test square calculation with all positive sides
3. Test received messages

**Test group**: triangle basics negative test group

**Test objects**: functions constructor(), getSquare(), getMessage()

**Type of tests**: negative

**Tests**:

1. Test square calculation with all negative sides