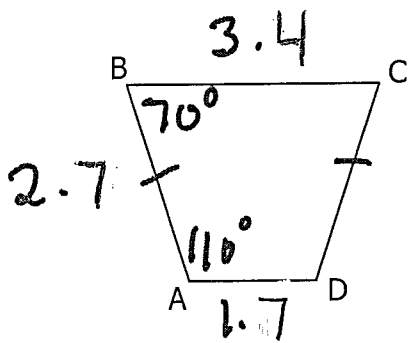For each of the following polygons:
- Measure all sides to the nearest tenth of a centimeter, and record
- Measure all angles, and record
- Use the Scale Factor, as a decimal, to determine the lengths of the sides on the enlargement and the reduction. SHOW THE CALCULATIONS AND RESULTS CLEARLY
- Use this information to sketch each enlargement and reduction

1. Given ABCD: Sketch an enlargement of 150% and then a reduction of 50%. Label all angles and sides.
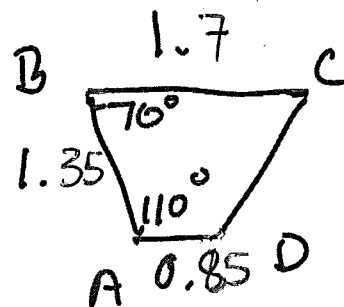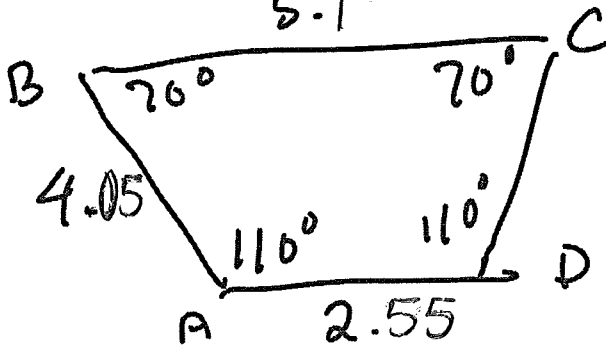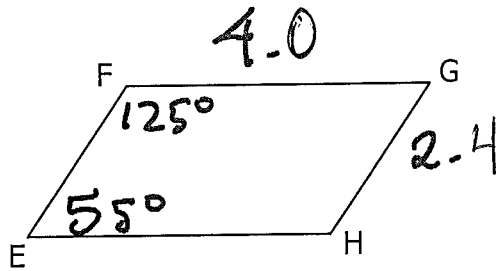
3.4

B _____ C
70°
2.7
110°
A 1.7 D

$$150°$$

BC : $3.4 \times 1.5 = 5.1$ cm

AB/cD : $2.7 \times 1.5 =$

AD : $1.7 \times 1.5 = 2.55$

5.1
B 70°   70° C
4.05
110°   110°
A   2.55   D

1.7
B _____ C
70°
1.35
110°
A 0.85 D

2. Given EFGH, sketch and enlargement of 125% and then a reduction of 75%. SAME INSTRUCTIONS AS Q#1

4.0

F
125°

55°
E   H

2.4

125%

EF/GH: 2.4 × 1.25
        ≈ 3.0

FG/EH: 4.0 × 1.25
        ≈ 5.0

F   5.0   G
  125°

  55°
                        3.0
E   H
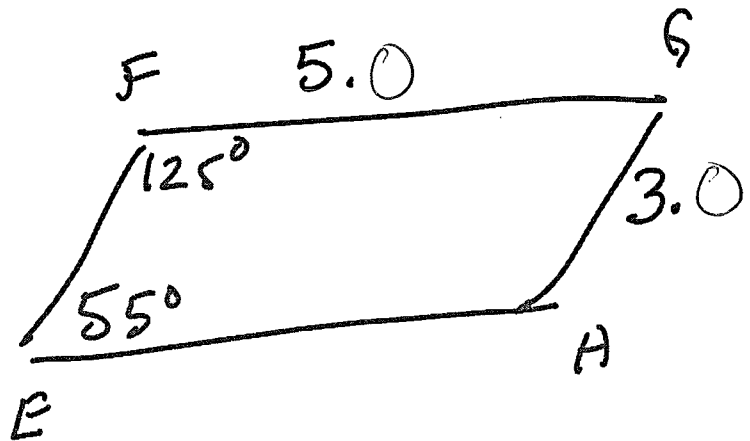
75%

EF/GH: 2.4 × 0.75
        ≈ 1.8

FG/EH: 4.0 × 0.75
        ≈ 3.0

F   3.0   G
  125°
  55°   1.8
E   H
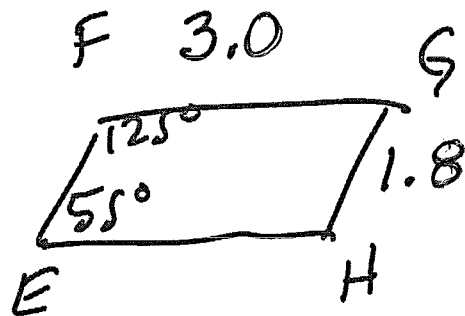
3. For the shape below: Sketch an enlargement of 200% and then a reduction of 50%.

R

Q

T

P

V
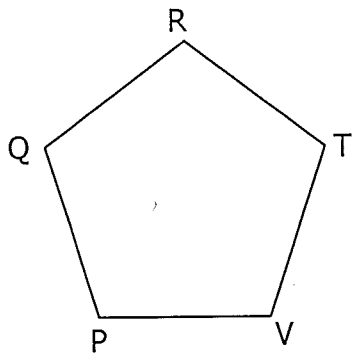
4. For the shape below: Sketch and label an enlargement of 150 % and then a reduction of 50%.