MATH LEAGUE 6TH WEEK SOLUTIONS:

1- CALCULATING THE BLUE AREA:

LET **A** BE THE AREA OF THE PART COLORED BLUE

LET **S** BE THE AREA OF THE SEMICIRCLE WITH DIAMETER **AQ**

LET **R** BE THE AREA OF THE SEMICIRCLE WITH DIAMETER **AP**

SINCE 2CM = QR = AP = PQ THEN

$$a = 2s - 2r$$

$$a = \frac{2^2\pi}{2} \times 2 - \frac{1^2\pi}{2} \times 2$$

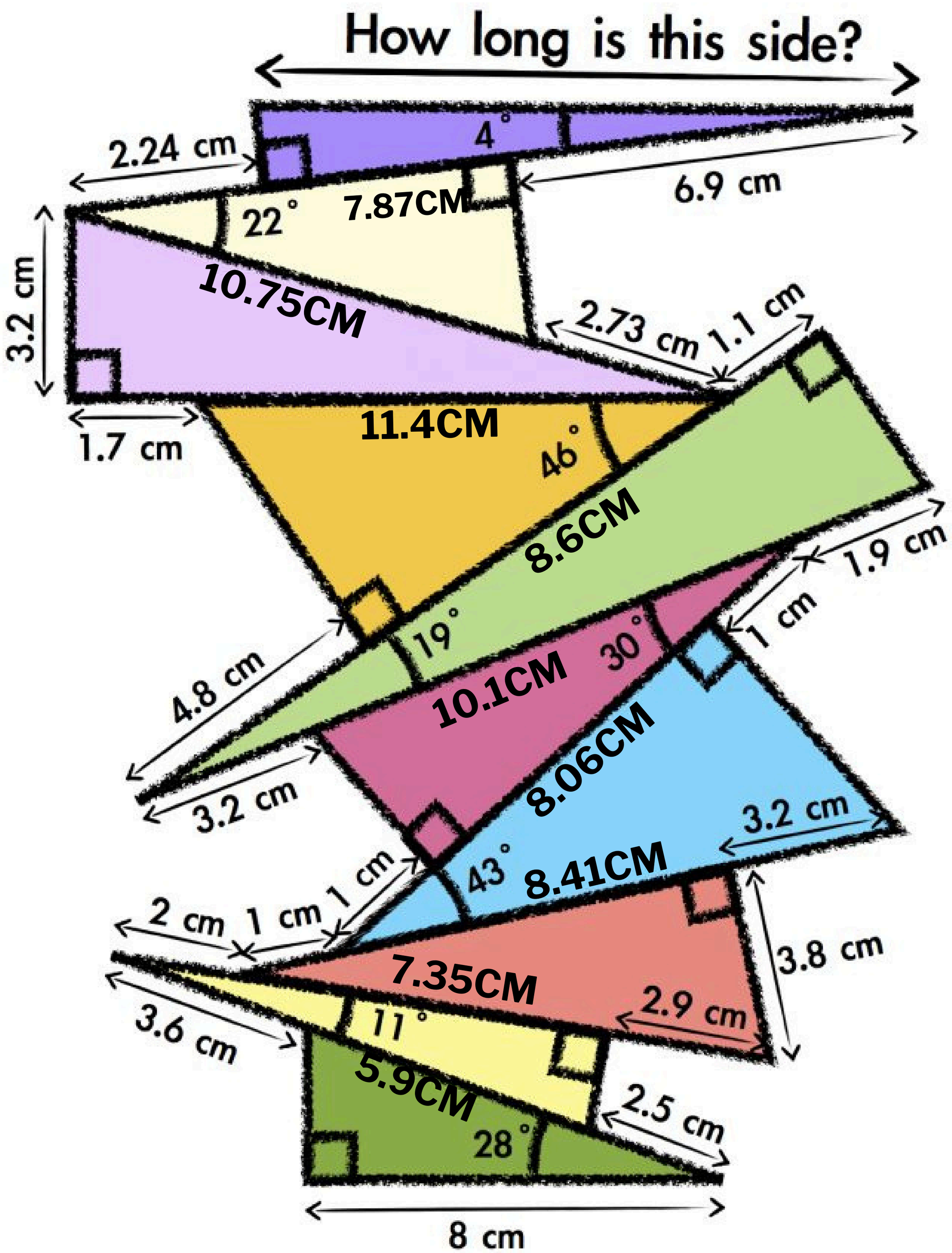
$$a = 4\pi - 2\pi$$

$$a = 2\pi$$

A=6,28 CM^2

2- CALCULATING THE LENGTH:

USING THE LAW OF THE COSINE OF AN ACUTE ANGLE IN A RIGHT TRIANGLE AND THE PYTHAGOREAN THEOREM



THE MISSED LENGH IS 10.79CM