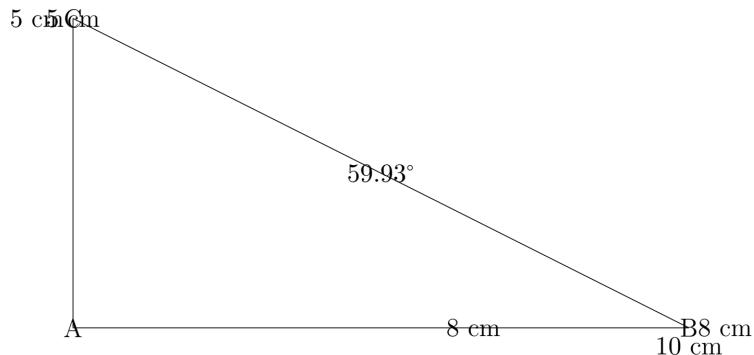


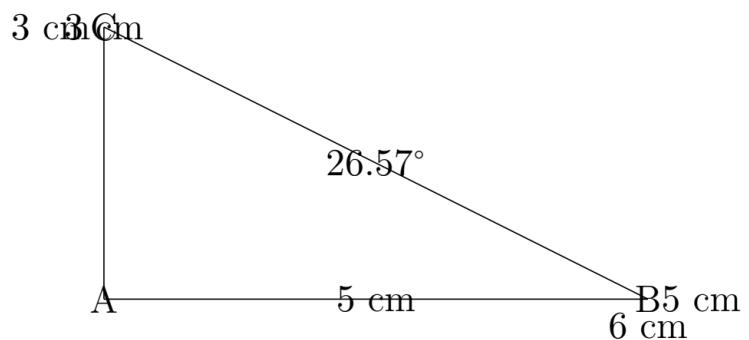
Pattern 0: Right Triangle Sine, Cosine, Tangent

Question 1: If $\sin(59.93^\circ) = 5/10$, what is $\cos(59.93^\circ)$ if the adjacent side is 8 units?



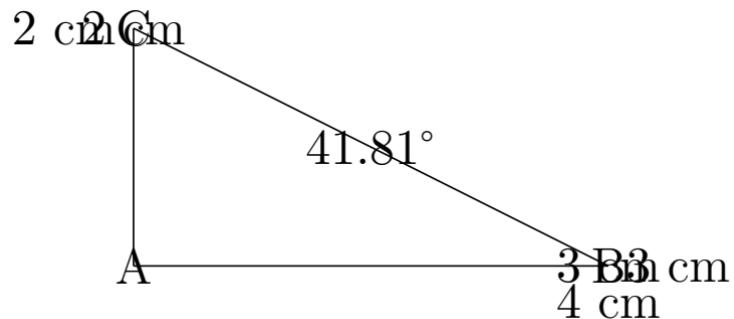
Answer: $\cos(59.93^\circ) = \text{adjacent/hypotenuse} = 8/10 = 0.8$

Question 2: Find the value of $\sin(26.57^\circ)$ if the opposite side is 3 units and the hypotenuse is 6 units.



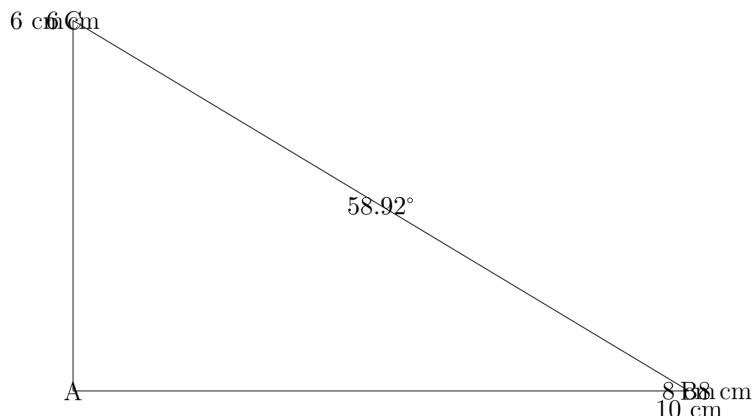
Answer: $\sin(26.57^\circ) = \text{opposite}/\text{hypotenuse} = 3/6 = 0.5$

Question 3: Find the value of $\cos(41.81^\circ)$ if the adjacent side is 3 units.



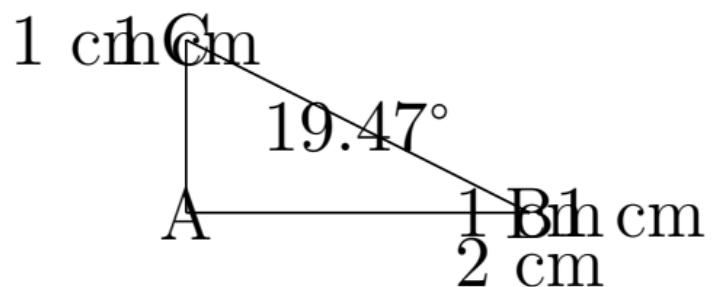
Answer: $\cos(41.81^\circ) = \text{adjacent/hypotenuse} = 3/4 = 0.75$

Question 4: If $\cos(58.92^\circ) = 8/10$, find the length of the opposite side.



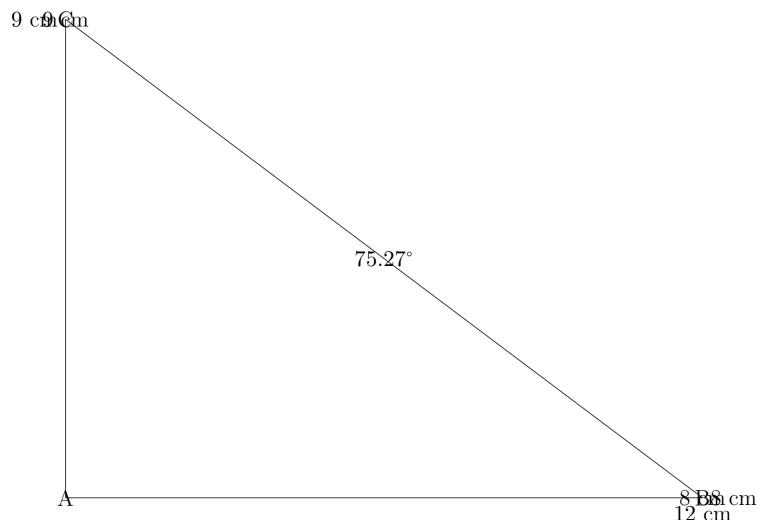
Answer: $\sin(58.92^\circ) = \text{opposite}/\text{hypotenuse} = 6/10 = 0.6$

Question 5: Find the value of $\tan(19.47^\circ)$ if the opposite side is 1 unit and the adjacent side is 1 unit.



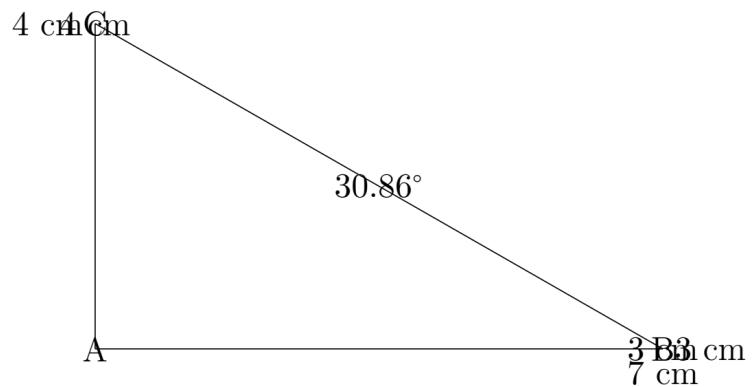
Answer: $\tan(19.47^\circ) = \text{opposite}/\text{adjacent} = 1/1 = 1$

Question 6: If $\sin(75.27^\circ) = 9/12$, find the length of the adjacent side.



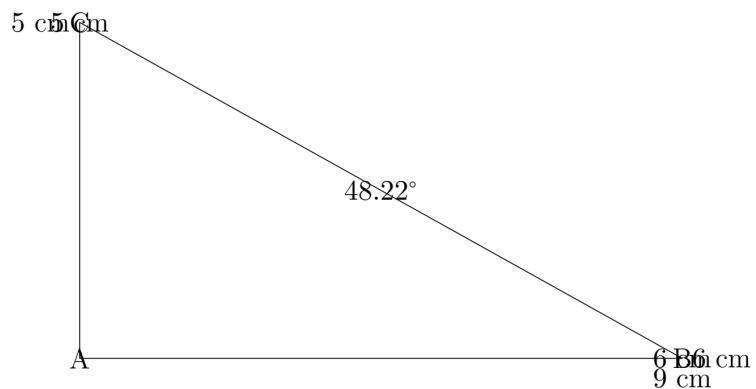
Answer: $\cos(75.27^\circ) = \text{adjacent/hypotenuse} = 8/12 = 0.67$

Question 7: Find the value of $\tan(30.86^\circ)$ if the opposite side is 4 units and the adjacent side is 3 units.



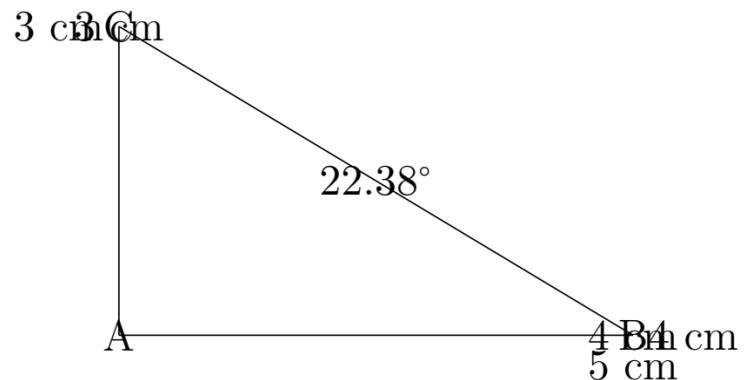
Answer: $\tan(30.86^\circ) = \text{opposite}/\text{adjacent} = 4/3 = 1.33$

Question 8: If $\cos(48.22^\circ) = 6/9$, find the length of the opposite side.



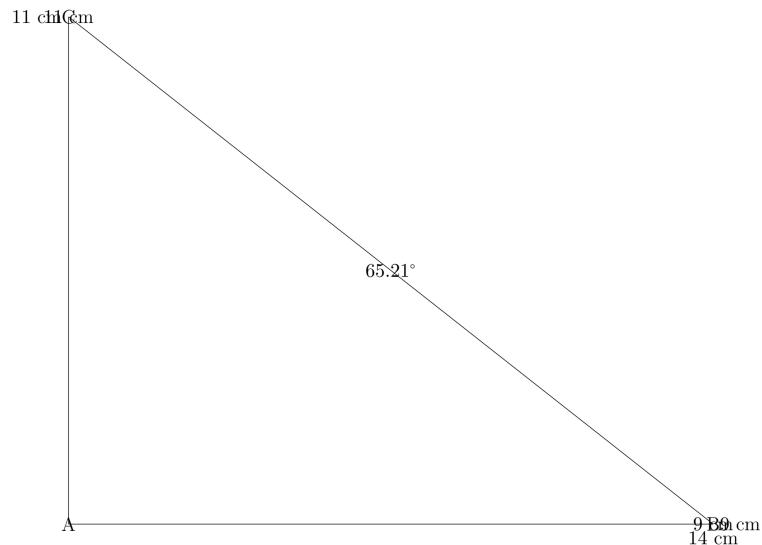
Answer: $\sin(48.22^\circ) = \text{opposite}/\text{hypotenuse} = 5/9 = 0.56$

Question 9: Find the value of $\sin(22.38^\circ)$ if the opposite side is 3 units and the hypotenuse is 5 units.



Answer: $\sin(22.38^\circ) = \text{opposite}/\text{hypotenuse} = 3/5 = 0.6$

Question 10: If $\cos(65.21^\circ) = 9/14$, find the length of the opposite side.



Answer: $\sin(65.21^\circ) = \text{opposite}/\text{hypotenuse} = 11/14 = 0.79$