\[ X_{cm,\text{tree}} = 9 \text{ cm by symmetry} \]

\[ Y_{cm,\text{tree}} = \frac{1(1) + 9(6) + 7(5) + 5(2) + 3(9) + 1(1)}{1 + 9 + 7 + 5 + 3 + 1} = \frac{136}{26} = 5.23 \text{ cm} \]

\[ Y_{cm,\text{doodle}} = \frac{27 \text{ cm by symmetry}}{12 - 5.23} = 6.77 \text{ cm} \]

combined \[ Y_{cm,\text{combined}} = \frac{5.23 + 6.77}{2} = 6 \text{ cm} \]