

Planimetria - mieszanka zadań ciekawych ZI-TK

zadanie 169

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3D

1 zadanie 169

$$|AC| = |BC| \quad |AD| = |CD| \quad |AB| = |BD|$$

$$T : |\sphericalangle ADC| = 5|\sphericalangle ACD|$$

$$D : \text{niech } |\sphericalangle ACD| = \alpha$$

$$|\sphericalangle CAD| = |\sphericalangle ACD| = \alpha$$

$$|\sphericalangle ADB| = 180^\circ - (180^\circ - 2\alpha) = 2\alpha$$

$$|\sphericalangle ADB| = |\sphericalangle DAB| = 2\alpha$$

$$|\sphericalangle DBA| = 180^\circ - 2\alpha - 2\alpha = 180^\circ - 4\alpha$$

$$|\sphericalangle CAB| = |\sphericalangle CAD| + |\sphericalangle DAB| = \alpha + 2\alpha = 3\alpha$$

$$180^\circ - 4\alpha = 3\alpha$$

$$180^\circ = 7\alpha$$

$$|\sphericalangle ADC| = 180^\circ - 2\alpha = 7\alpha - 2\alpha = 5\alpha = 5|\sphericalangle ACD| \text{ cnd}$$

