

Report on I. Vasenov's paper Tiling of regular polygon with similar right triangles,
<https://arxiv.org/abs/2010.05052v2>

As far as I see, only a slightly weaker statement than Theorem 2 is proved in the paper. In line 6 from the bottom of page 3 it is stated that

“Since $\alpha \notin \{\pi/n, 2\pi/n, (\pi/6) + (2\pi/3n)\}$, by Lemma 8 it follows that $\alpha \notin \{\pi/10, \pi/5, 3\pi/14, \pi/6, \pi/8\}$.”

This is not correct, since Lemma 8 states that if a satisfies the conditions then *either a or $1 - a$ is in $\{2/n, 4/n, (1/3) + (4/3n)\}$* . There are cases when $1 - a$ belongs to this set, and these cases are not covered by the proof. For example, if $n = 5$ and $a = 1/5$, then $1 - a = 4/n$, and thus the case $n = 5, \alpha = \pi/10$ should be included as a possible case in Theorem 2.