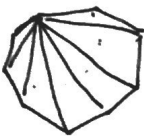



HW 5 MA202 10.3

10.3.4) a) Not closed, so not a polygon. b) No, curved side. c) Yes. Closed w/ all straight sides.


10.3.6) a)  7 Δ s: sum of interior angles
 $\Rightarrow 7 \cdot 180 = 1260^\circ$

b)  4 Δ s: sum is $4 \cdot 180 = 720^\circ$

10.3.8) a) Hexagon, so $(6-2) \cdot 180 = 720^\circ$ b) Octagon, so $(8-2) \cdot 180 = 1080^\circ$

10.3.10) a) Yes, all angles & sides congruent. b) Yes, all angles and sides congruent.
c) No, an equilateral Δ has 3 60° angles. d) No, the measure of an interior angle of an octagon is $1080/8 = 135^\circ$.

10.3.14) a) Heptagon, so $123 + 112 + 147 + 127 + 127 + 126 + x = 900^\circ$ b) Hexagon, so $x + 144 + 141 + 133 + 90 + 90 = 720^\circ$
 $x = 138^\circ$ $x = 122^\circ$

10.3.26) 

10.3.34) No. All such polygons have angle measures that do not multiply w/ an integer to get 360° , so any attempted tessellation will have gaps.