

Polygons & Angles

Find the sum of the interior \angle measures of each convex polygon.

- ① hexagon ② decagon ③ 30-gon

Find the sum of the exterior \angle measures (one from each vertex) of each convex polygon.

- ④ pentagon ⑤ triangle ⑥ nonagon

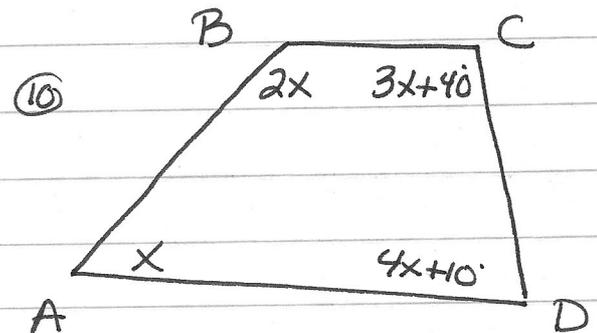
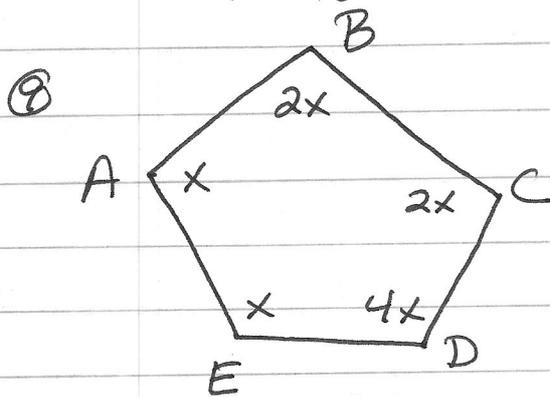
For each regular polygon, find:

- a) measure of one interior \angle
b) measure of one exterior \angle

- ⑦ octagon ⑧ dodecagon

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For each polygon, find each interior \angle measure.



Answers:

① 720° ② $1,440^\circ$ ③ $5,040^\circ$ ④ 360°

⑤ 360° ⑥ 360° ⑦ a) 135° b) 45°

⑧ a) 150° b) 30°

⑨ $m\angle A = 54^\circ$, $m\angle B = 108^\circ$, $m\angle C = 108^\circ$, $m\angle D = 216^\circ$,
 $m\angle E = 54^\circ$

⑩ $m\angle A = 31^\circ$, $m\angle B = 62^\circ$, $m\angle C = 133^\circ$, $m\angle D = 134^\circ$