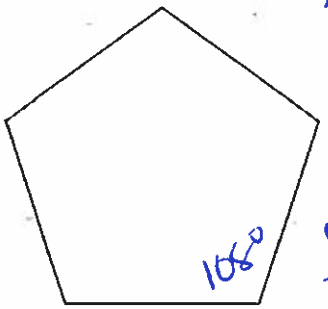
Mathématique Appliquée 30S
Revue : Polygones

Nom : _____ Date : _____

A) Détermine la mesure des angles intérieurs des polygones réguliers ci-dessous.

1)

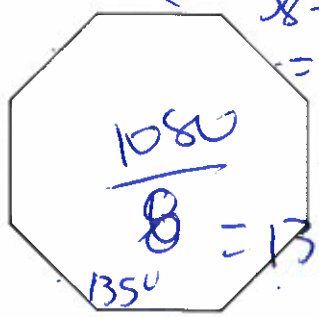


$S_5 = 180(5-2)$

$S_5 = 540$

$\frac{540}{5} = 108°$

2)

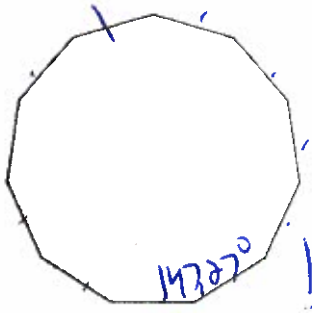


$S_8 = 180(8-2)$

$= 1080$

$\frac{1080}{8} = 135°$

3)

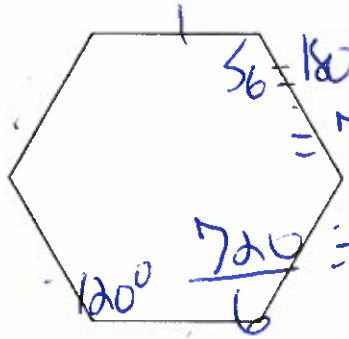


$S_{11} = 180°(11-2)$

$= 1620$

$\frac{1620}{11} = 147,27°$

4)

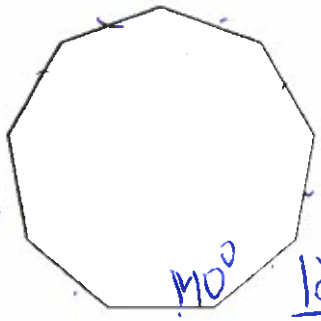


$S_6 = 180°(6-2)$

$= 720°$

$\frac{720}{6} = 120°$

5)

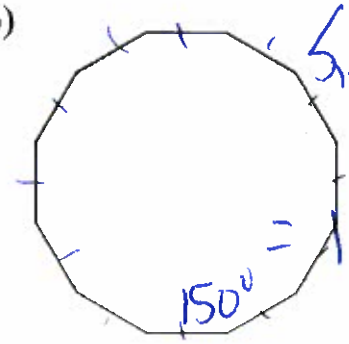


$S_9 = 180°(9-2)$

$= 1260°$

$\frac{1260}{9} = 140°$

6)



$S_{12} = 180°(12-2)$

$= 1800$

$\frac{1800}{12} = 150°$

7) Un polygone avec 24 côtés

$S_{24} = 180°(24-2)$

$= 3960$

$\frac{3960}{24} = 165°$

8) Un quadrilatère

$S_4 = 360°$

$90°$ ..

~~9) Un polygone avec 24 côtés~~

10) Un polygone avec 16 côtés

$S_{16} = 180°(16-2)$

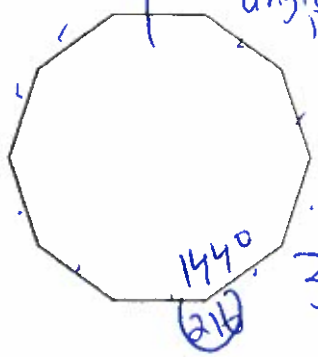
$= 2520°$

$\frac{2520}{16}$

$= 157,5°$

B) Détermine la mesure des angles extérieurs des polygones réguliers ci-dessous.

11)



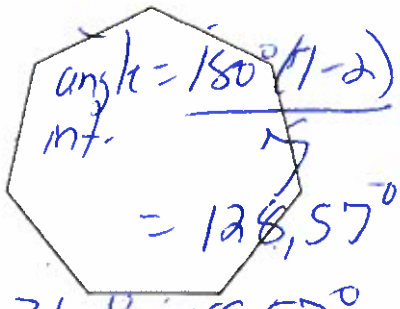
angle intérieurs $= \frac{180(10-2)}{10}$

$= 144°$

$360° - 144 = 216°$

ext:

12)



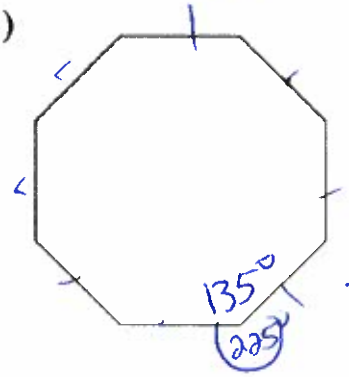
angle int. $= \frac{180°(7-2)}{7}$

$= 128,57°$

ext. $360° - 128,57°$

$= 231,43°$

13)

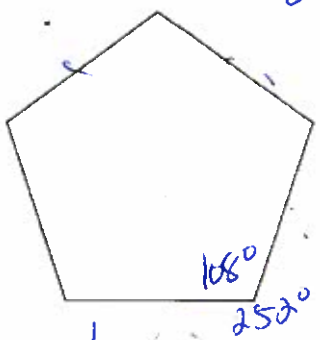


angle (int.) $= \frac{180(8-2)}{8}$

$= 135°$

ext: $360° - 135 = 225°$

14)



angle int. $= \frac{180°(5-2)}{5}$

$= 108°$

$360° - 108° = 252°$