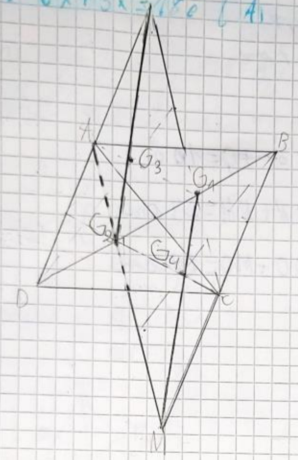
$3x + 180 - 6x + 3x = 180°$ (A)



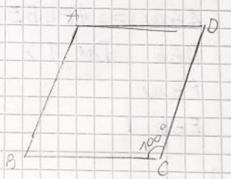
Evaluare sumativă

1. $∢D = \frac{360° - (∢A + ∢C)}{2}$

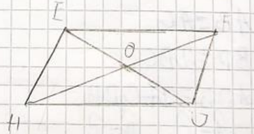
$= \frac{360° - 200°}{2}$

$= 80°$

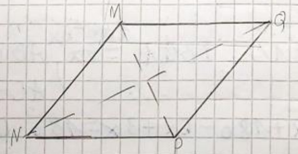
R: C. 80°



2. R: DEF și HG



3. R: A. 90°



4.

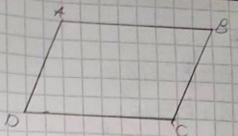
$P = 2AB + 2BC$

$P = 2 \cdot 0,8BC + 2BC$

$54 = 1,6BC + 2BC$

$54 = 3,6BC$

$BC = 15$



$AB = 0,8BC \Rightarrow AB = 0,8 \cdot 15 \Rightarrow AB = 12$

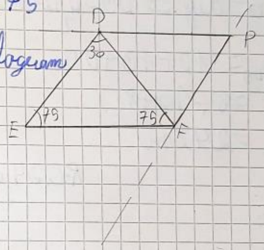
$AB = CD \Rightarrow CD = 12$

R: B. 12 cm

5.

ΔDEF iso. $\Rightarrow ∢E = ∢F = \frac{150°}{2} = 75°$

$PF \parallel DE$ (ip.), $DP \parallel EF$ (ip.) } $\Rightarrow DPFE$ paralelogram



$\Rightarrow DF$ - diag.

⇓

$∢PDF = ∢EFD = 75°$

$∢PFD = ∢EDF = 30°$

$∢P = 180° - 105°$

$= 75°$

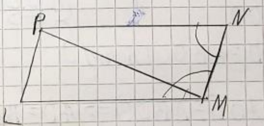
R: C. 75°

6. LMNP - patrulater

$PN \parallel LM$, NM - sec. } $\Rightarrow ∢LMN + ∢MNP =$

$= 180°$ (d.a.p.a. sec.)

R: D. 180°



7.

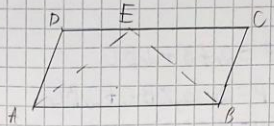
$A + B = 180°$

$A_1 + B_1 = 90°$

$∢AEB = 180° - 90°$

$= 90°$

R: B. 90°



8.

ABCD - paral.

$AD = BC = 6 cm$

AC - diag. $\Rightarrow AO = \frac{AC}{2} = 10 cm$

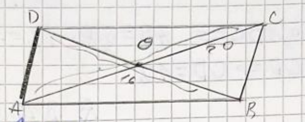
DB - diag. $\Rightarrow DO = \frac{DB}{2} = 8 cm$

$P_{ADO} = AD + AO + DO$

$= 6 + 10 + 8$

$= 24 cm$

R: C. 24 cm



II.

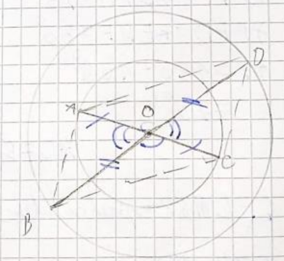
$C_1 \cap C_2 = \{O\}$

$AO = CO = r$

$BO = OD = R$

$AO = OC$, $BO = OD$, $∢AOD = ∢BOC$ (o.v.) } $\overset{(L.U.L)}{\Rightarrow}$

$\Rightarrow \Delta AOD \equiv \Delta BOC \Rightarrow AD = BC$ (1)

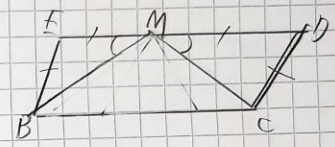


$AO = OC$, $BO = OD$, $∢AOB \equiv ∢DOC$ (o.v.) } $\overset{(L.U.L)}{\Rightarrow}$ $\Delta AOB \equiv \Delta DOC$ ⇓ $AB = DC$ (2)

Din 1 și 2 $\Rightarrow$ ABCD - paral. $\Rightarrow$ AB $\parallel$ CD

b) (*) ABCD - paral. $\Rightarrow$ $\sphericalangle$ABC $\equiv$ $\sphericalangle$ADC

2.



BC = 2DC

M - mij. lat DE $\Rightarrow$ EM = MD $\Big\} \Rightarrow$

$\Rightarrow$ BE = EM = MD = DC

$\triangle$BEM - isos.

$\triangle$MDC - isos