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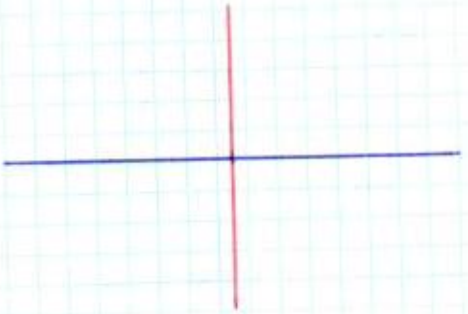
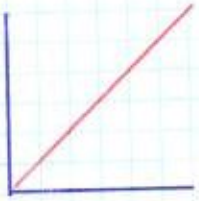
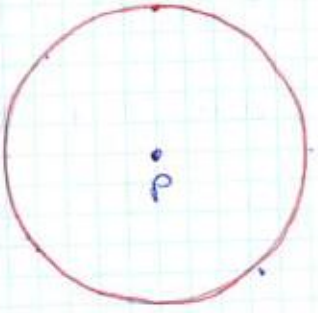
(1) a)



b)



c)



(3)

a) Lugar geométrico de los puntos que equidistan $d/2$ de la recta r

b) Lugar geométrico de los puntos que están a una distancia "d" de la "r" y que están alineados con el punto P.

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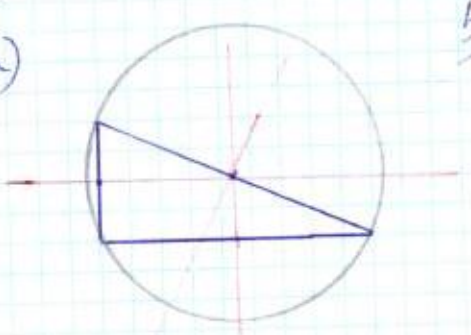
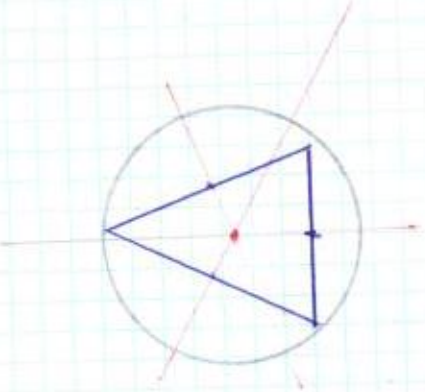
(4) a)



b)



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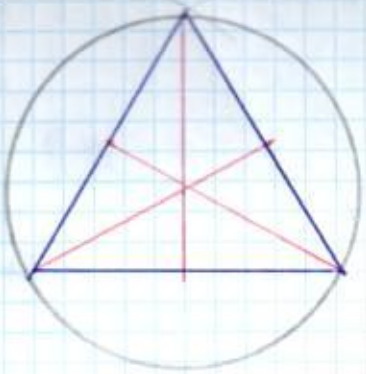
(5)



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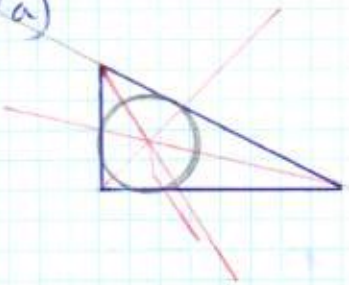
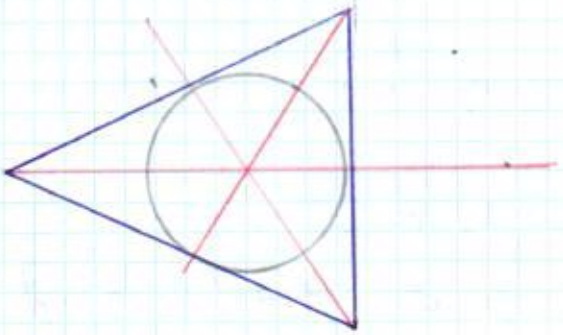
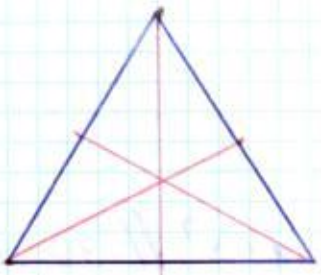
(7) a)



b)



(8)



ortocentro e incentro coinciden

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(53) $a_n = a_1 + (n-1)\cdot d$

$a_n = 7 + (n-1)\cdot 6$

$79 = 7 + (n-1)\cdot 6$

$79 - 7 = (n-1)\cdot 6$

$72 = (n-1)\cdot 6$

$(n-1) = \frac{72}{6} = 12$ // $n = 12+1 = 13$

$n = 13$

(57) $1, a_2, a_3, a_4, 9$

$a_n = a_1 + (n-1)\cdot d$

Para $a_5 = 9 \Rightarrow 9 = 1 + (5-1)\cdot d = 1 + 4d$

$9 = 1 + 4d$ // $4d = 9 - 1 = 8$ // $d = \frac{8}{4} = 2$

a $1, 3, 5, 7, 9$

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(74) $a_n = a_1 \cdot r^{n-1}$ // $a_3 = a_1 \cdot r^2$ // $30 = 6 \cdot r^2$

$r^2 = \frac{30}{6} = 5$ // $r = \pm\sqrt{5}$

$a_4 = a_1 \cdot r^3$ // $a_4 = 6 \cdot (\pm\sqrt{5})^3 = \pm 30\sqrt{5}$

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(94) a) $a_n = a_1 + (n-1)\cdot d = 150 + (n-1)\cdot 30$

$a_{12} = 150 + (11)\cdot 30 = \underline{480 \text{ usuarios}}$

b)

$S = \dfrac{(a_1 + a_n)\cdot n}{2}$ // $a_{10} = 150 + (9)\cdot 30 = \underline{420}$

$S_{10} = \dfrac{(a_1 + a_{10})\cdot 10}{2} = \dfrac{(150 + 420)\cdot 10}{2} = \underline{2.850}$

(97) Será la suma de los 8 primeros términos de una progresión geométrica con $r = 2$ y $a_1 = 0'25$

$$S_n = \frac{a_1 (r^n - 1)}{r - 1}$$

$$S_8 = \frac{0'25\,(2^8 - 1)}{2 - 1} = \frac{0'25 \cdot 255}{1} = \underline{63'75\ €}$$