

3: Vertices son : A(3,1) B(1,-3) C(0,y)

$$A = 30^2 \quad \frac{1}{2} = \begin{vmatrix} 3, 1 \\ 1, -3 \\ 0, y \\ 3, 1 \end{vmatrix} = \frac{1}{2} (-9 + y) - (3y + 1)$$
$$3 = \frac{1}{2} (-9 + y - 3y - 1) = \frac{1}{2} (-10 - 2y)$$

$$3 = \frac{1}{2} (-10 - 2y)$$

$$6 = -10 - 2y$$

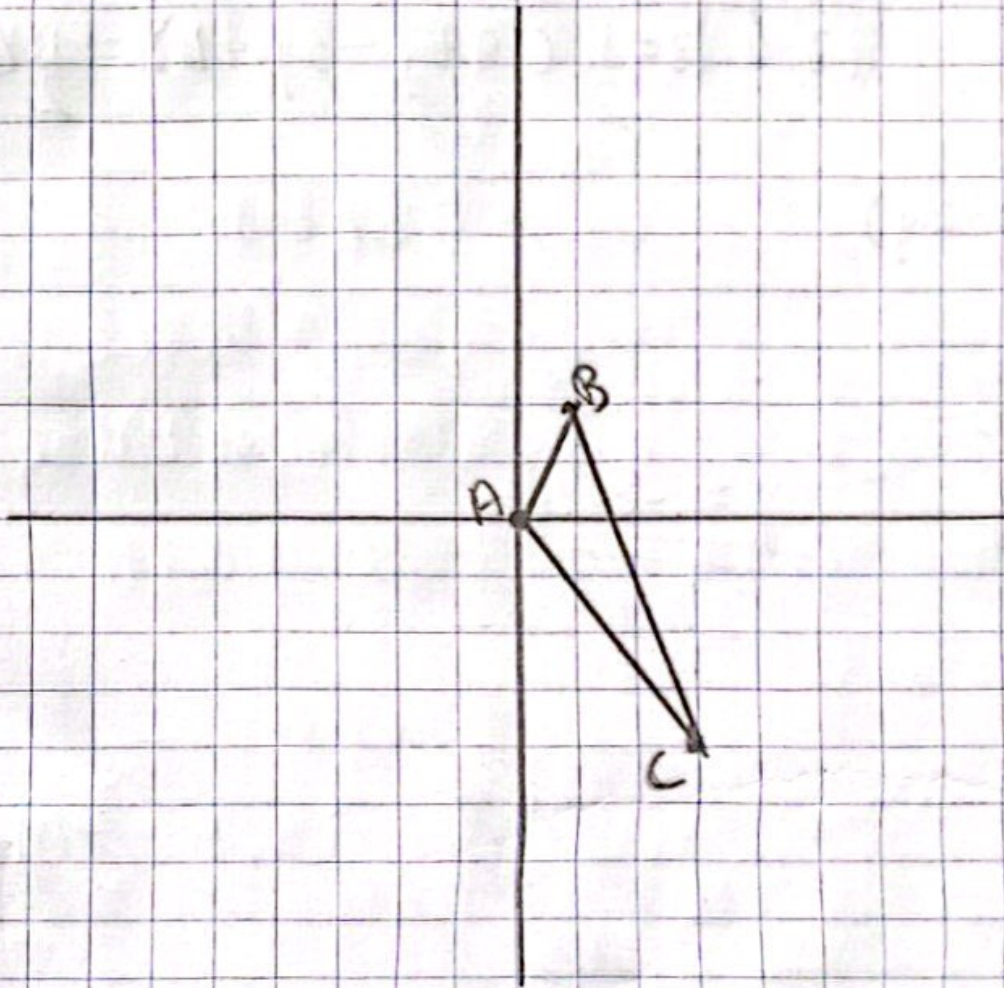
$$6 + 10 = -2y$$

$$\frac{16}{-2} = y$$

$$\del y = -8$$

$$D \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$$\sqrt{(0 - 1)^2 + (0 - 2)^2}$$



1º A(0,0) B(1,2) y C(3,-4)

$$A = \frac{1}{2} \begin{vmatrix} 0,0 \\ 1,2 \\ 3,-4 \\ 0,0 \end{vmatrix} = \frac{1}{2} (0-4-0) - (0+6+0)$$
$$= \frac{1}{2} (-4) - (6) = 10$$

$$D_{AB} = \sqrt{2+4} = 2,44$$

$$S = \frac{a+b+c}{2}$$

$$D_{BC} = \sqrt{4+36} = 6,32$$

$$S = \frac{2,44+6,32+5}{2} = 6,88$$

$$D_{CA} = \sqrt{9+16} = 5$$

$$A = \sqrt{S(S-a)(S-b)(S-c)}$$

$$A = \sqrt{6,88(6,88-2,44)(6,88-6,32)(6,88-5)}$$

$$A = \sqrt{6,88(4,44)(0,56)(1,88)}$$

$$32,160 \cdot 0,67$$

08-10-24

1: Vertices son : A(-8,3) B(-1,5) C(7,-1) y D(-2,-6)

$$A = \frac{1}{2} \begin{vmatrix} -8, 3 \\ -1, 5 \\ 7, -1 \\ -2, -6 \\ -8, 3 \end{vmatrix} = \frac{1}{2} \begin{matrix} (-90+1-42-6) - (48+2+35-3) \\ (-87) - (82) \\ 2 \\ (-169) \end{matrix}$$

$$D = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \quad D_{BC} = \sqrt{64 + 36} \quad \left. \vphantom{D} \right\} = 5$$

$$D_{AB} = \sqrt{81 + 64} \quad D_{BC} = \sqrt{100} = 10$$

$$D_{AB} = \sqrt{145} = 12.04 \quad D_{CD} = \sqrt{81 + 25} \quad \left. \vphantom{D} \right\} = 5.14$$

$$D_{DA} = \sqrt{36 + 81} \quad D_{CD} = \sqrt{106} = 10.29$$

$$D_{DA} = \sqrt{117} = 10.81$$

5. A(-3,3) B(4,2) C(7,7) D(-1,6)

$$A = \frac{1}{2} \begin{vmatrix} -3 & 3 \\ 4 & 2 \\ 7 & 7 \\ -1 & 6 \end{vmatrix} = \frac{1}{2} (-6 + 28 + 36) - (-7 + 14 + 12)$$
$$\frac{1}{2} (58) - (40)$$
$$\frac{1}{2} (98)$$

$$D \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$D_{AB} = \sqrt{1 + 1} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} 0.7 \text{ SP}$$
$$D_{AB} = \sqrt{2} = 1.4$$

$$D_{BC} = \sqrt{121 + 81} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} 7.1 \text{ SP}$$
$$D_{BC} = \sqrt{202} = 14.2$$

$$D_{CD} = \sqrt{36 + 169} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} 7.15 \text{ SP}$$
$$D_{CD} = \sqrt{205} = 14.3$$

$$D_{DA} = \sqrt{4 + 81} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} 9.6 \text{ SP}$$
$$D_{DA} = \sqrt{85} = 9.2$$

6. $A(0,0)$ $B(1,2)$ $C(3,-4)$

$$A = \frac{1}{2} \begin{vmatrix} 0,0 \\ 3,-4 \\ 1,2 \\ 0,0 \end{vmatrix} = \frac{1}{2} (-4) - (6)$$
$$\frac{1}{2} (-10)$$

$$S = a + b + c$$

$$S = \frac{6.32 + 5 + 2.2}{2}$$

$$S = 6.76$$

$$A = \sqrt{6.76 (6.76 - 6.32) (6.76 - 5) (6.76 - 2.2)}$$

$$A = \sqrt{6.76 (0.44) (1.76) (4.56)}$$

$$A = \sqrt{23.8} \quad A = 4.88$$

2: Vertices son: A (1, 5) B (-4, 6) C (-8, -2)

$$x = \frac{x_1 + x_2}{1 + 1} \quad y = \frac{y_1 + y_2}{1 + 1}$$

$$x = \frac{-1 + 1(-4)}{1 + 1} \quad y = \frac{5 + 1(6)}{1 + 1} \quad \left. \vphantom{x} \right\} = -2.5, 0.5 \text{ PM}_{AB}$$

$$x = \frac{-5}{2} = -2.5 \quad y = \frac{-1}{2} = -0.5$$

$$x = \frac{-4 + 1(-8)}{1 + 1} \quad y = \frac{-6 + 1(-2)}{2} \quad \left. \vphantom{x} \right\} = -6, -4 \text{ PM}_{BC}$$

$$x = \frac{-12}{2} = -6 \quad y = \frac{-8}{2} = -4$$

$$x = \frac{-8 + 1(-1)}{1 + 1} \quad y = \frac{-2 + 1(5)}{1 + 1} \quad \left. \vphantom{x} \right\} = -4.5, 1.5 \text{ PM}_{CA}$$

$$x = \frac{-9}{2} = -4.5 \quad y = \frac{3}{2} = 1.5$$

1º A(0,0) B(1,2) y C(3,-4)

$$A = \frac{1}{2} \begin{vmatrix} 0,0 \\ 1,2 \\ 3,-4 \\ 0,0 \end{vmatrix} = \frac{1}{2} (0 - 4 - 0) - (0 + 6 + 0)$$
$$= \frac{1}{2} (-4) - (6) = -10$$

$$D_{AB} = \sqrt{1 + 4} = 2,23$$

$$s = \frac{a+b+c}{2}$$

$$D_{BC} = \sqrt{4 + 36} = 6,32$$

$$s = \frac{2,23 + 6,32 + 5}{2} = 6,77$$

$$D_{CA} = \sqrt{9 + 16} = 5$$

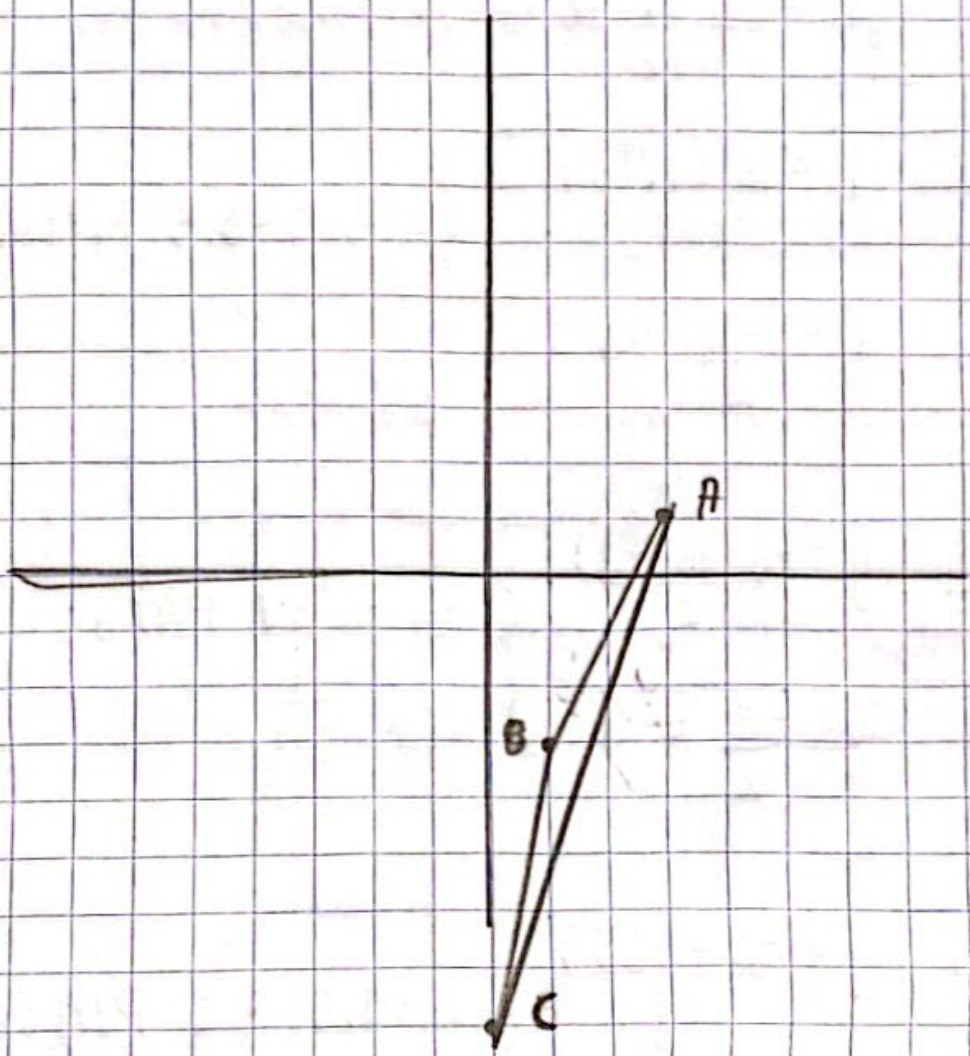
$$A = \sqrt{s(s-a)(s-b)(s-c)}$$

$$A = \sqrt{6,77(6,77-2,23)(6,77-6,32)(6,77-5)}$$

$$A = \sqrt{6,77(4,54)(0,45)(1,77)}$$

$$23,34 \cdot 4,83$$

x y



KS 01-20

$(A, B, C) = (1, 1, 2), (-1, 2), (4, 2)$

$(a, b, c) = (1, 1, 2), (-1, 2), (4, 2)$

