Warm Up March 21, 2019

1.) Quadrilateral ABCD has coordinates A(-2, -3), B(0, 4), C(6, 4), and D(4, -3).

A.) Graph the coordinates.

B.) Find the slope of each side.

C.) Find the distance of each side.

Circle which quadrilateral best describes Quadrilateral ABCD :

~~Rectangle~~ Parallelogram ~~Rhombus~~

~~Square~~ ~~Trapezoid~~

1.) Quadrilateral ABCD has coordinates A(-2, -3), B(0, 4), C(6, 4), and D(4, -3).

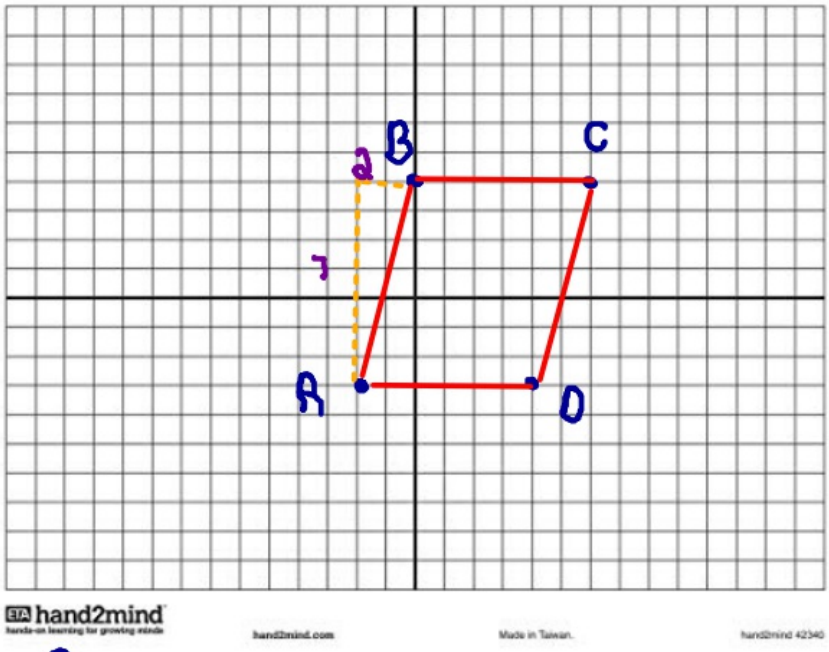
Slopes

$\overline{AB}: m = \frac{7}{2}$

$\overline{BC}: m = 0$

$\overline{CD}: m = \frac{7}{2}$

$\overline{AD}: m = 0$



Distances

$\overline{AB}$ $a^2 + b^2 = c^2$

$(7)^2 + (2)^2 = c^2$

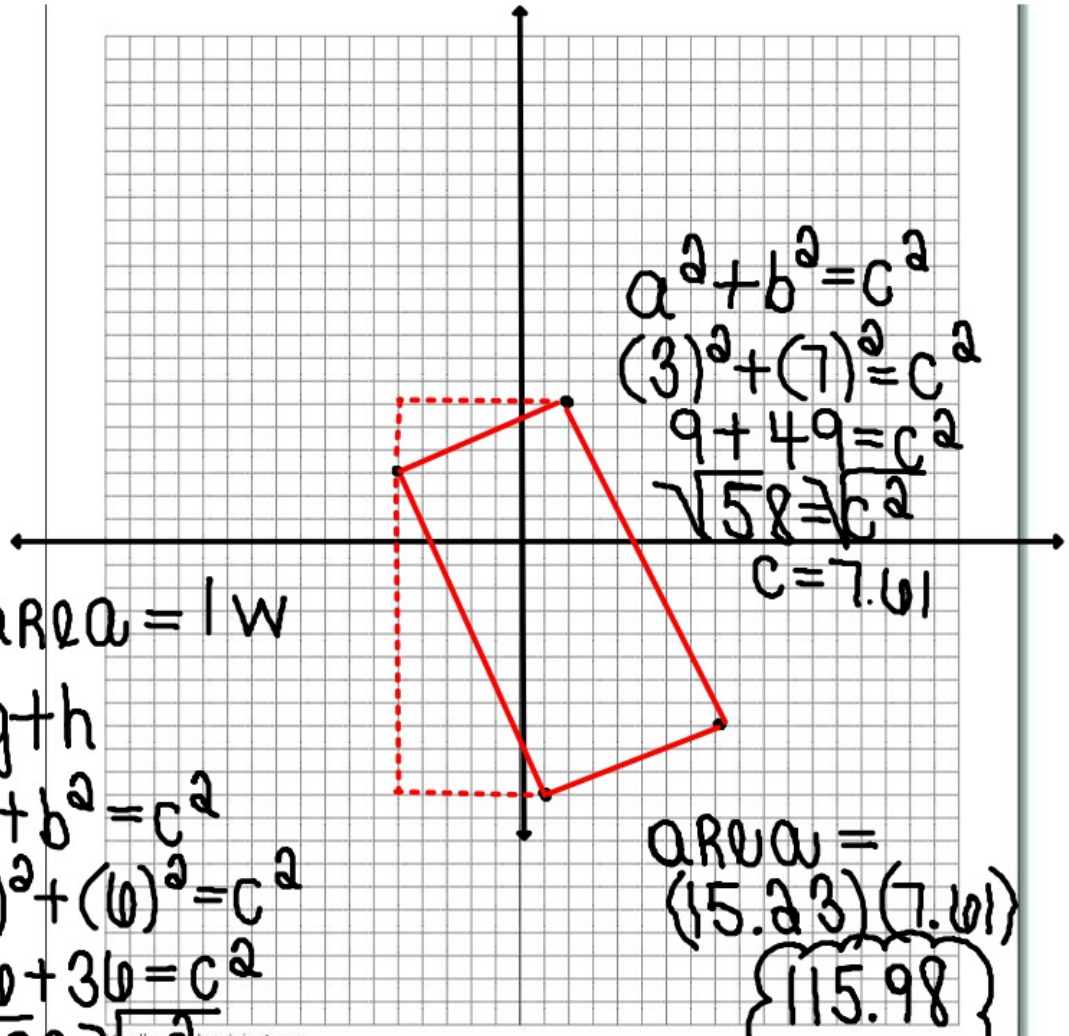
$49 + 4 = c^2$

$\sqrt{53} = \sqrt{c^2}$

$\overline{AB} = 7.28$

$\overline{BC} = 6$

What is the area of rectangle with vertices at A(-5, 3), B(2, 6), C(8, -8), and D(1, -11)?



$a^2+b^2=c^2$

$(3)^2+(7)^2=c^2$

$9+49=c^2$

$\sqrt{58}=\sqrt{c^2}$

$c=7.61$

$AREA = lw$

length

$a^2+b^2=c^2$

$(14)^2+(6)^2=c^2$

$196+36=c^2$

$\sqrt{232}=\sqrt{c^2}$

$c=15.23$

$AREA = (15.23)(7.61)$

115.98