

Example #1: Find the area of the triangle whose vertices are given. $(-2,8), (6,2), (-2,2)$

$$A = \pm \frac{1}{2} \text{determinant}$$
$$A = \pm \frac{1}{2} \begin{vmatrix} -2 & 8 & 1 \\ 6 & 2 & 1 \\ -2 & 2 & 1 \end{vmatrix} = \frac{1}{2}(-48) = \boxed{24}$$

Example #2: Find the area of the triangle whose vertices are given. $(5,-7), (-1,4), (-5,-2)$

$$A = \pm \frac{1}{2} \det$$
$$A = \pm \frac{1}{2} \begin{vmatrix} 5 & -7 & 1 \\ -1 & 4 & 1 \\ -5 & -2 & 1 \end{vmatrix}$$

Apr 25-7:22 AM