

## Reteaching 10-1 Area: Parallelograms

Draw the parallelogram with vertices  $A(-2, 4)$ ,  $B(1, 4)$ ,  $C(0, -2)$ , and  $D(-3, -2)$ . Find its area.

Plot the four points and connect them to form the parallelogram. To find the area, find the length of a base and the height to that base. Any one of the four sides could be used as the base. The easiest side to use is  $\overline{DC}$ .

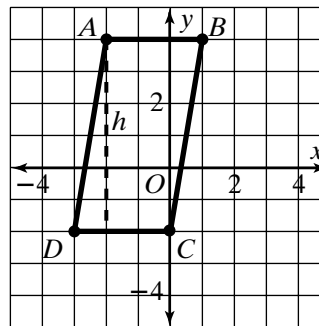
Count in the figure.

$DC = 3$  units, so  $b = 3$ .

Draw the height as a dashed line from  $A$ , perpendicular to  $\overline{DC}$ .

Count in the figure,  $h = 6$ .

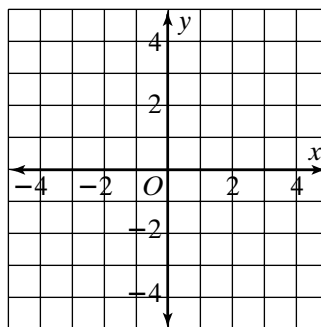
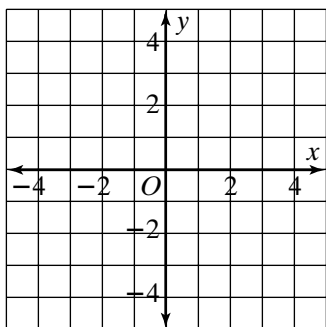
So  $A = bh = 3(6) = 18 \text{ unit}^2$ .



**The vertices of a parallelogram are given. Draw each parallelogram. Find its area.**

1.  $E(-1, 2)$ ,  $F(3, 2)$ ,  $G(1, 1)$ ,  $H(-3, 1)$

2.  $M(-2, 1)$ ,  $N(2, 1)$ ,  $Q(-3, -2)$ ,  $P(1, -2)$



3.  $R(1, 3)$ ,  $S(3, 3)$ ,  $U(-1, -4)$ ,  $T(1, -4)$

4.  $V(-3, -1)$ ,  $W(5, -1)$ ,  $Y(-4, -3)$ ,  $X(4, -3)$

