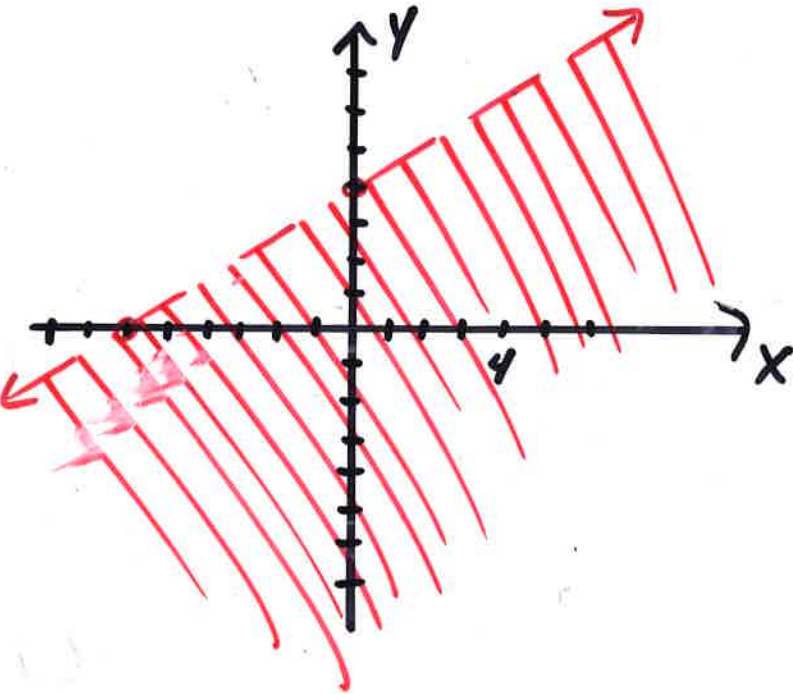


2.8

TWO-VARIABLE INEQUALITIES

EX: GRAPH $-2X + 3Y < 12$



$$-2X + 3Y < 12$$

$$X_{INT} : -6$$

$$Y_{INT} : 4$$

DOTTED LINE FOR $<$ OR $>$

SOLID LINE FOR \leq OR \geq

TEST POINT : $(0, 0)$

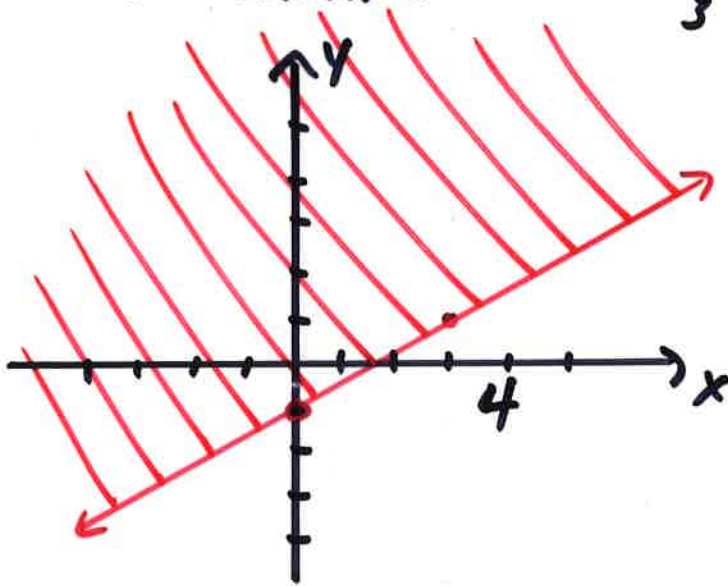
$$-2(0) + 3(0) < 12$$

$$0 < 12$$

TRUE

SHADE SIDE CONTAINING
TEST POINT

EX: GRAPH $Y \geq \frac{2}{3}x - 1$



$Y_{INT} = -1$

$m = \frac{2}{3}$

SOLID \geq

SHADE ABOVE

NO TEST POINT
NEEDED WHEN
SOLVED FOR Y .

EX: GRAPH $-Y + 1 > |x + 2|$

$$-Y + 1 > |x + 2|$$

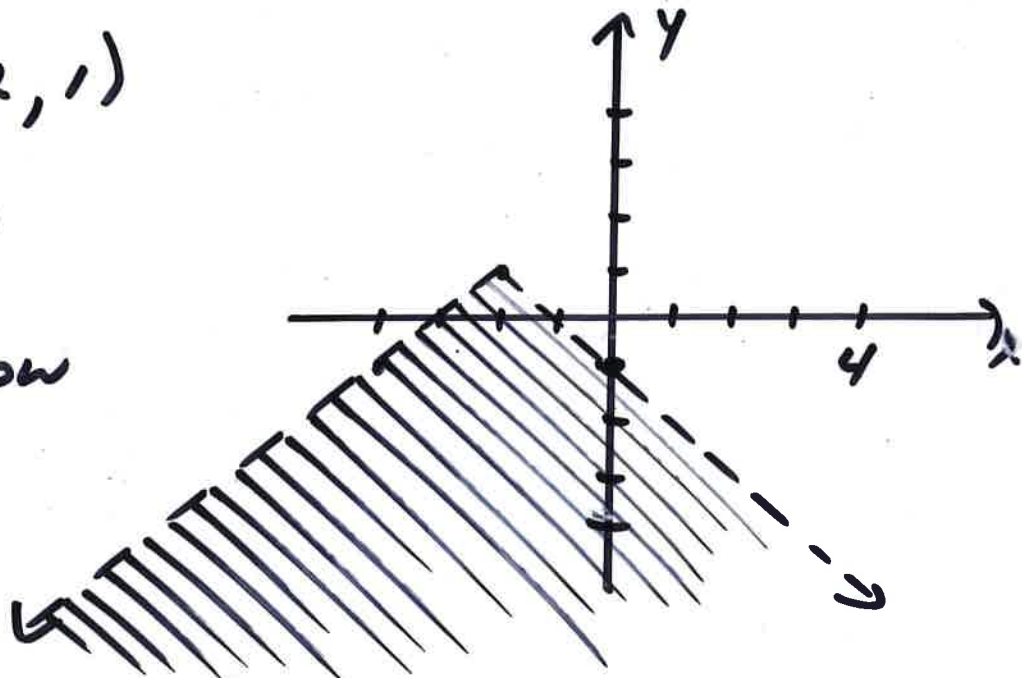
$$-Y > |x + 2| - 1$$

$$Y < -|x + 2| + 1$$

VERTEX: $(-2, 1)$

OPENS DOWN

SHADED BELOW



HW: 12-42 EVEN