$$y = a(x-h)^2 + k$$

$$y = \frac{1}{4p}(x-h)^2 + k$$

$$x = \frac{1}{4p}(y-k)^2 + h$$

26.

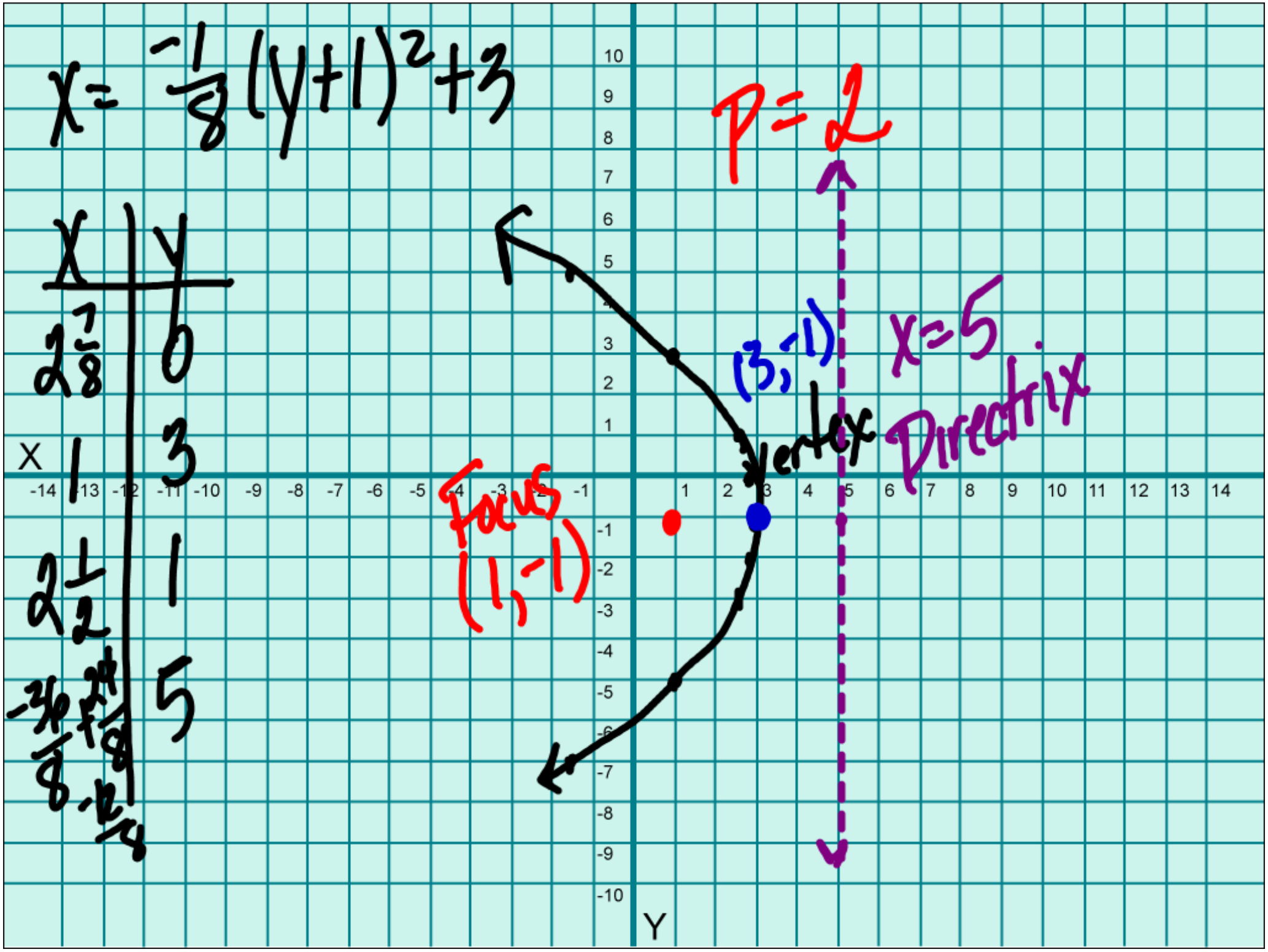
$$x - 3 = -\frac{1}{8}(y+1)^2$$

$$x = -\frac{1}{8}(y - (-1)) + 3$$

$$x = \frac{1}{4p}(y-k) + h$$

Vertex (h,k) $(3,-1)$

Open left $p = -2$


$x = -\frac{1}{8}(y+1)^2+3$
X
Y
$2\frac{7}{8}$ 0
1 3
$2\frac{1}{2}$ 1
$-3\frac{3}{8}$ $2\frac{1}{8}$ 5
$-12\frac{1}{8}$
p = 2
(3, -1)
vertex
x = 5
Directrix
Focus
(1, -1)

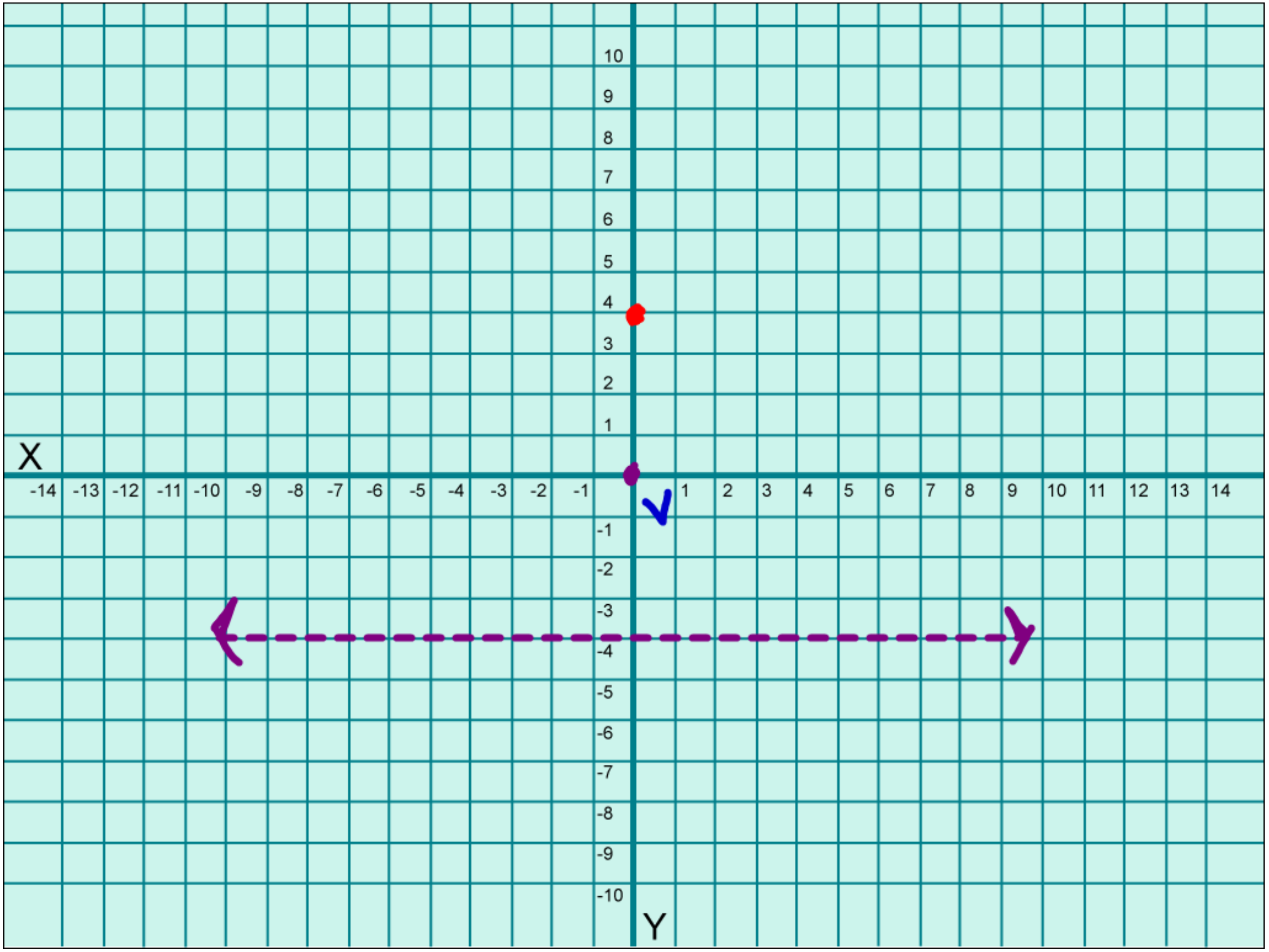
h k

10. $(-2, 2)$

$$x = \frac{1}{4(3)}(y-2)^2 + -2$$

$$x = \frac{1}{4p}(y-k)^2 + h$$

$$x = \frac{1}{12}(y-2)^2 - 2$$


X
Y
10
9
8
7
6
5
4
3
2
1
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 12 13 14

9.3 Circles

$$x^2 + y^2 = r^2$$

Center $(0,0)$ Radius r

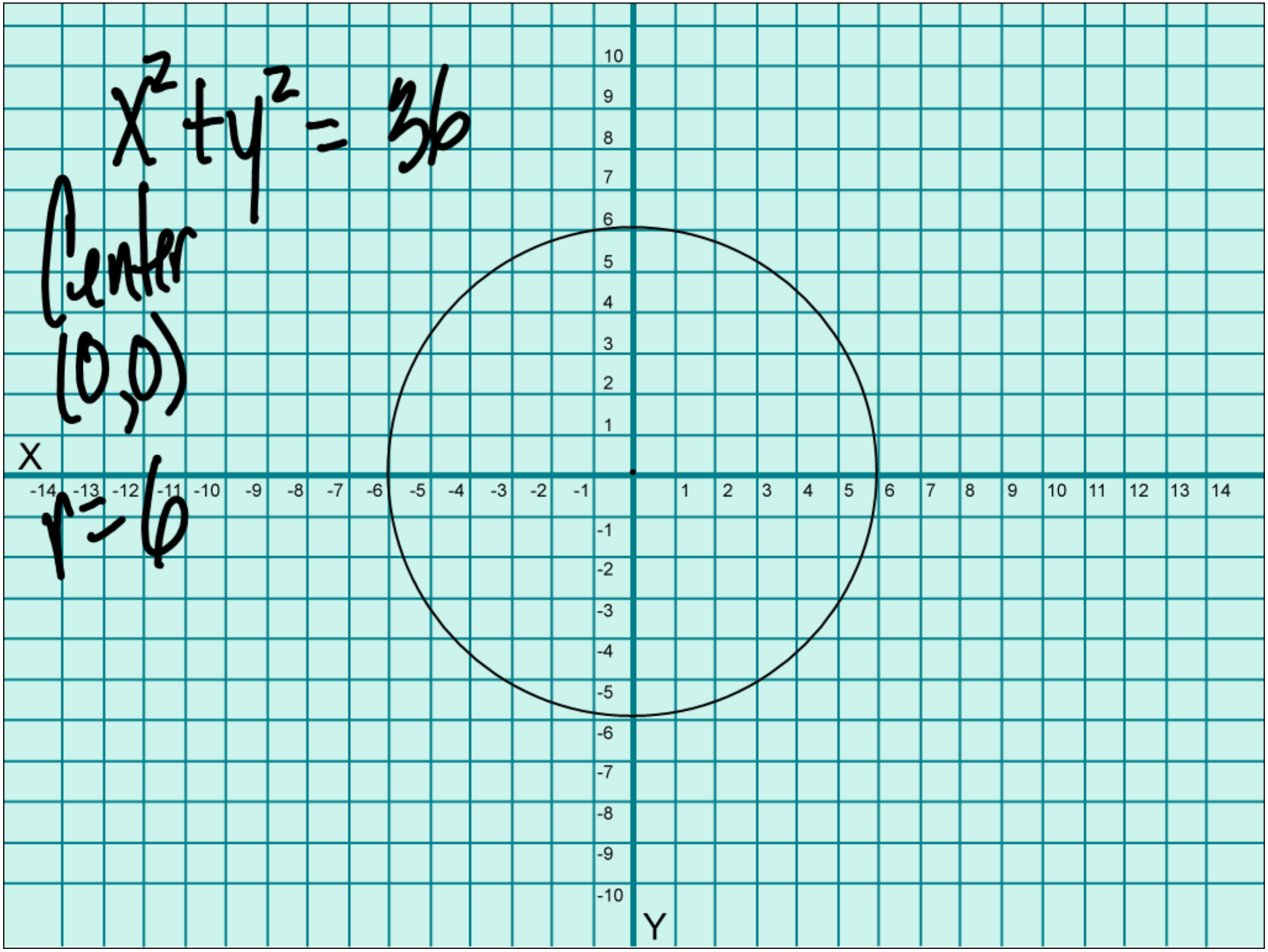
$$x^2 + y^2 = 25$$

Center $(0,0)$ Radius $r = 5$

$x^2 + y^2 = 36$

Center
(0,0)

$r = 6$



$$(x-h)^2 + (y-k)^2 = r^2$$

Center (h, k)

Radius r

$$(x-2)^2 + (y+5)^2 = 49$$

Center $(2, -5)$

Radius $r = 7$

$$(x+4)^2 + (y-3)^2 = 16$$

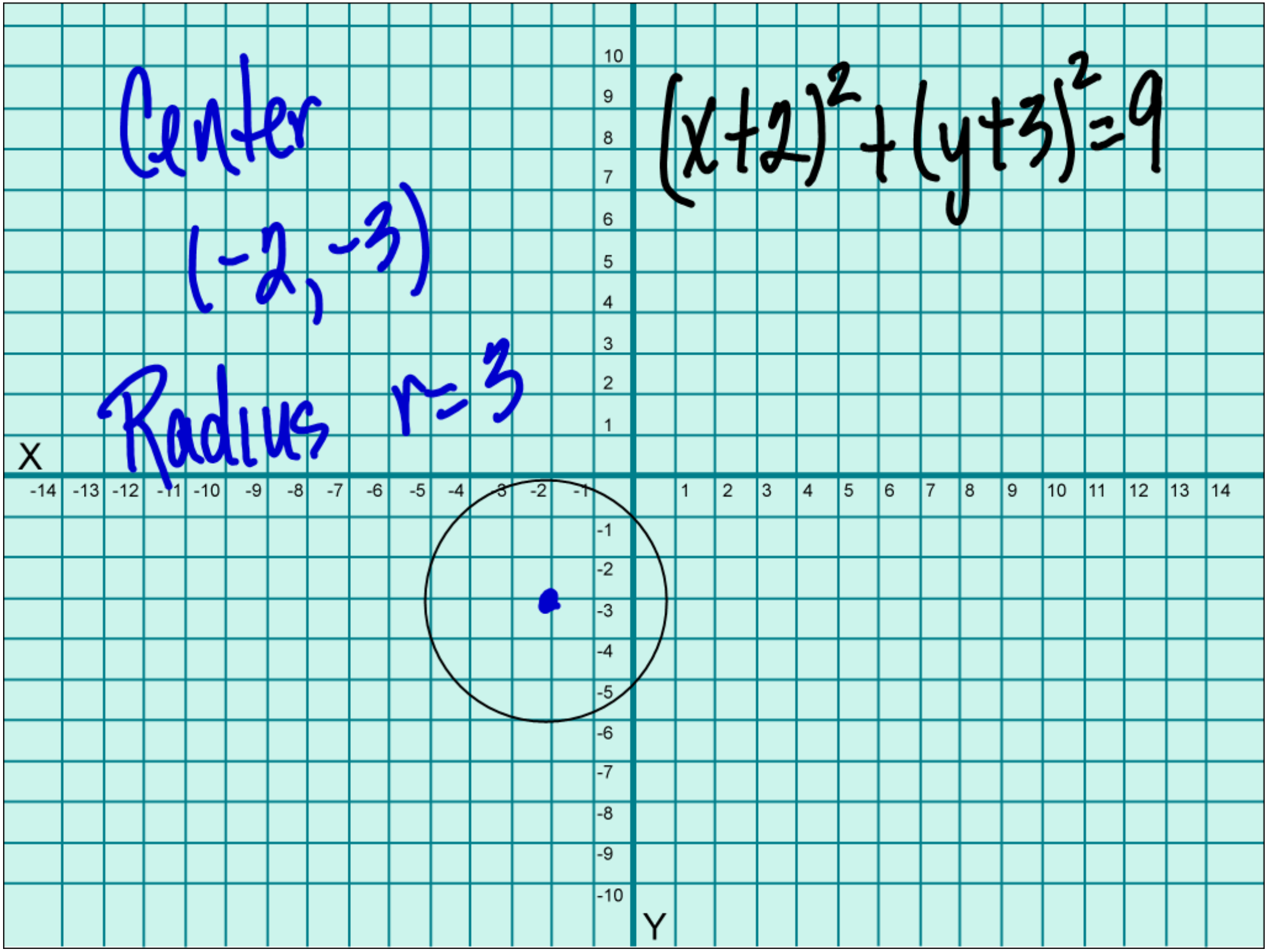
Center $(-4, 3)$

Radius $r = 4$

Center $(1, -5)$

Radius $r = 2$

$$(x-1)^2 + (y+5)^2 = 4$$


Center
(-2, -3)
Radius r=3
$(x+2)^2+(y+3)^2=9$
X
Y

47

p584

$x^2 + 2x + y^2 + 6y = 6$

$(x^2 + 2x + 1) + (y^2 + 6y + 9) = 6 + 1 + 9$

$\frac{2}{2} = 1$, $1^2 = 1$

$\frac{6}{2} = 3$, $3^2 = 9$

$(x+1)^2 + (y+3)^2 = 16$

Center $(-1, -3)$

Radius $r = 4$

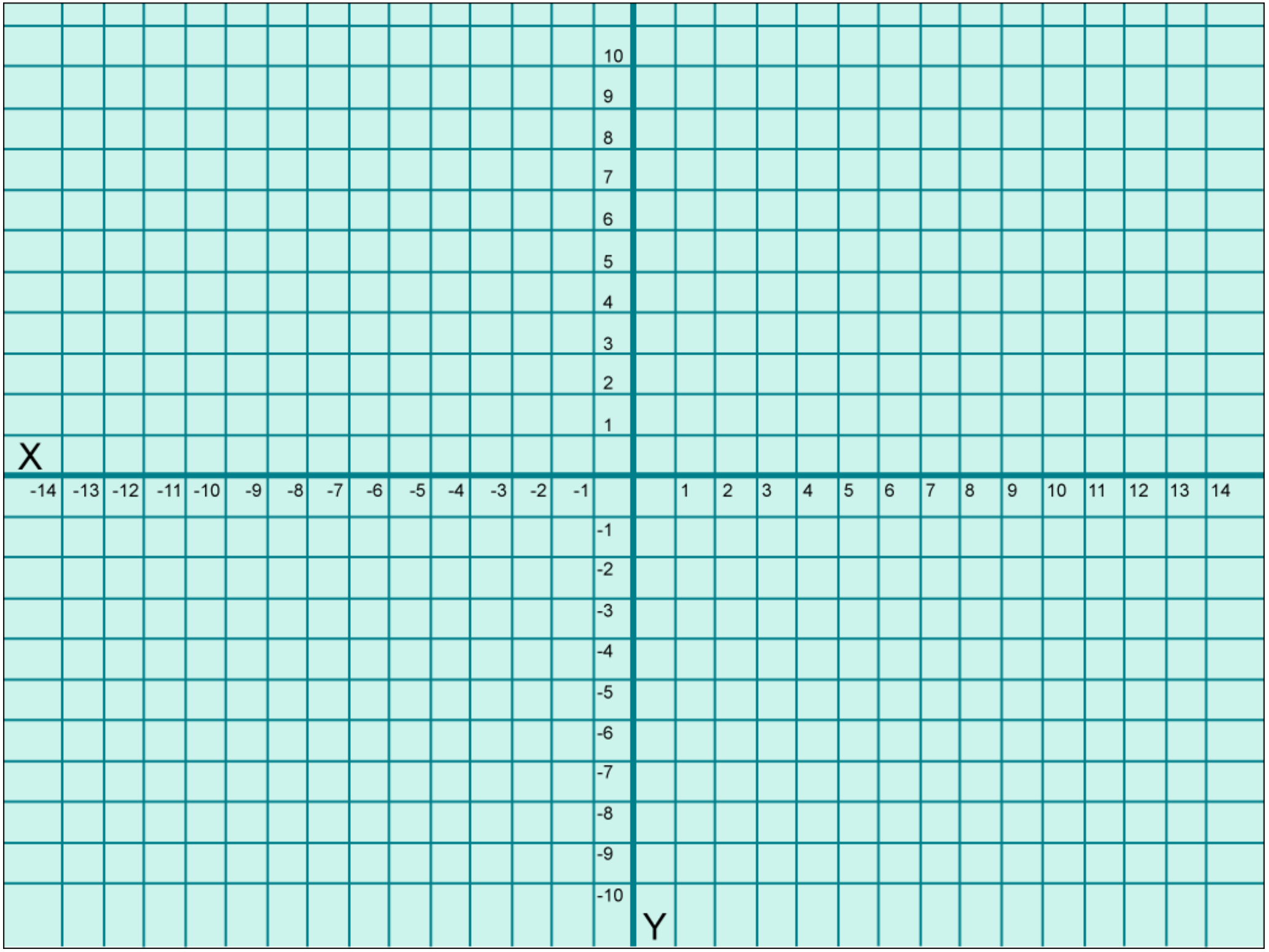
p576 10-46E

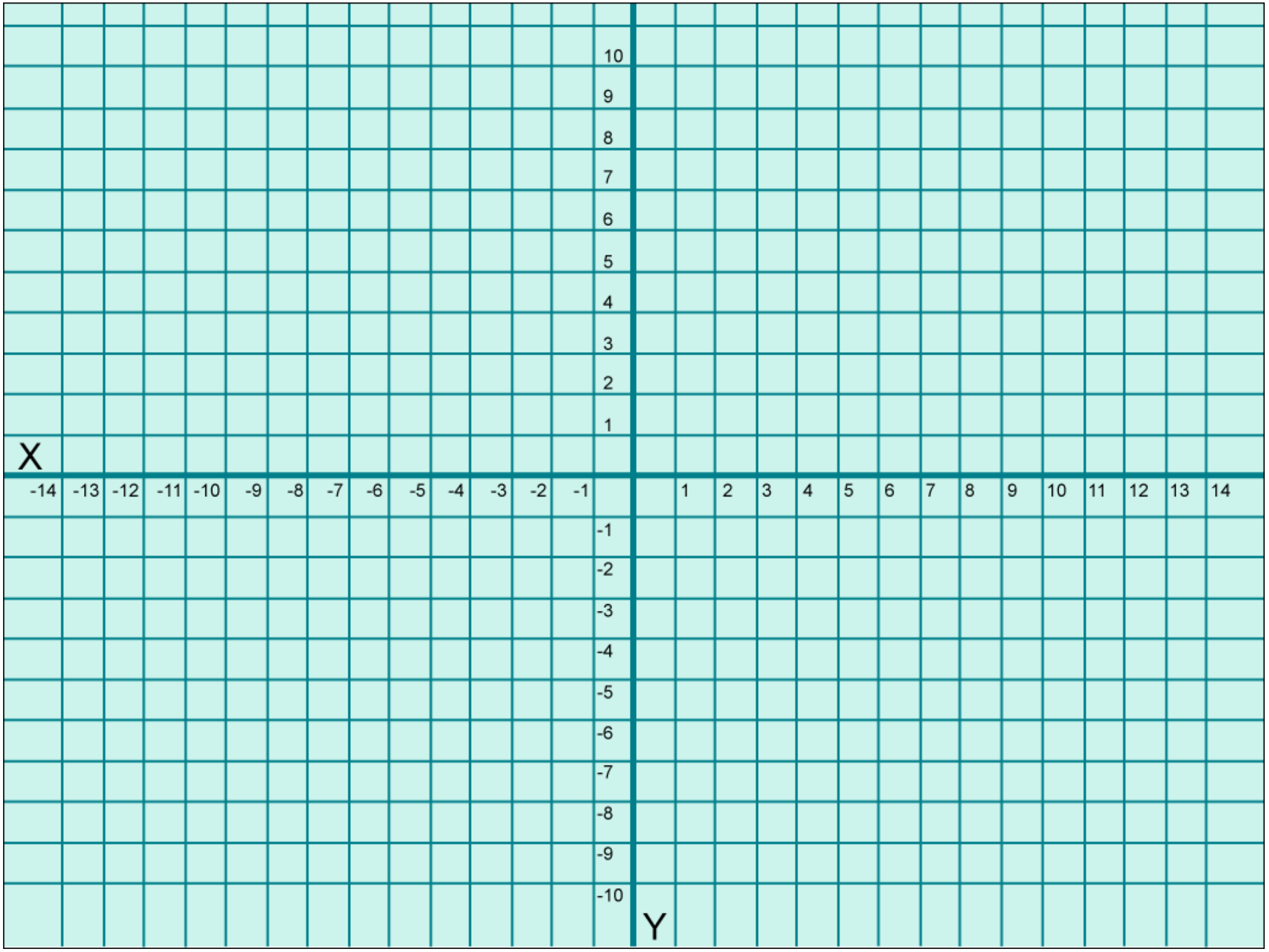
p583 8-40 x4

48

Monday p591 12-36 x4

Tues Fri Thurs


10
9
8
7
6
5
4
3
2
1
X
-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1
1 2 3 4 5 6 7 8 9 10 11 12 13 14
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
Y


10
9
8
7
6
5
4
3
2
1
X
-14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1
1 2 3 4 5 6 7 8 9 10 11 12 13 14
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
Y