

$x=1$ 41 p298

$x \geq 1$

$x=8$

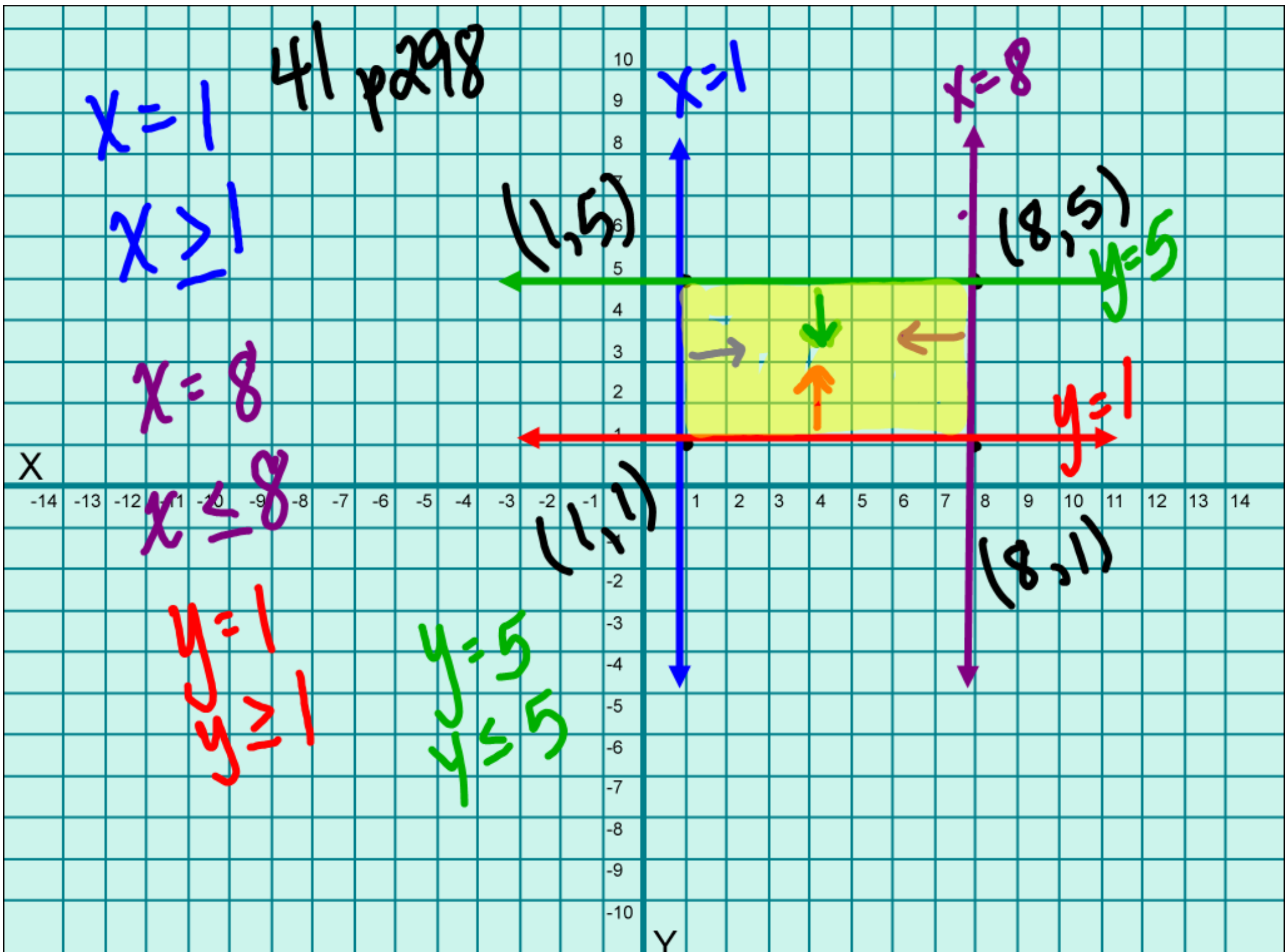
$x \leq 8$

$y=1$
 $y \geq 1$

$y=5$
 $y \leq 5$

X

Y



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

$$x^2 + y^2 = 4^2$$

$$0^2 + 0^2 \leq 16$$

$$0 \leq 16$$

$$x^2 + y^2 \leq 16$$

X

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

10

9

8

7

6

5

4

3

2

1

-1

-2

-3

-4

-5

-6

-7

-8

-9

-10

-10

-9

-8

-7

-6

-5

-4

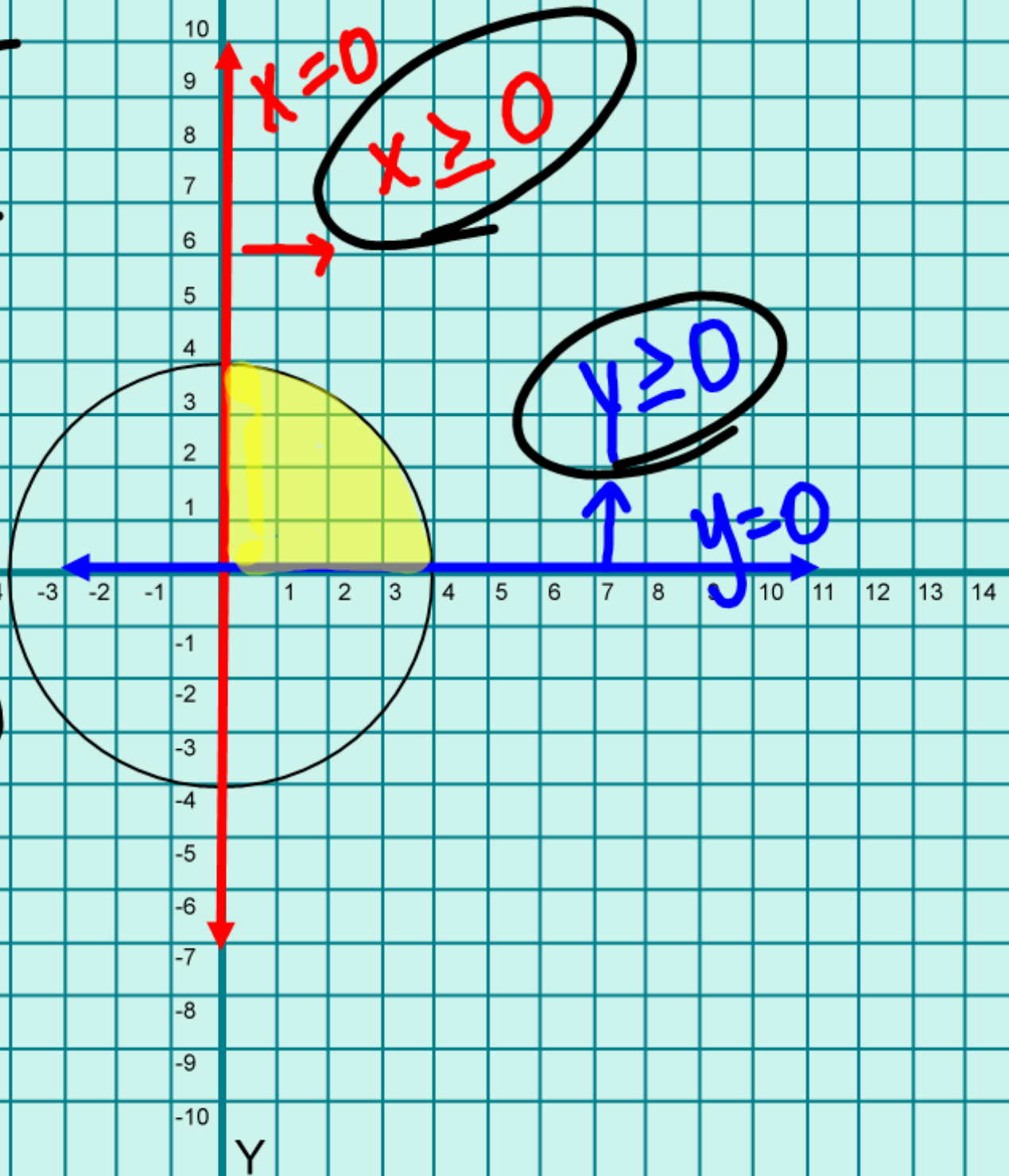
-3

-2

-1

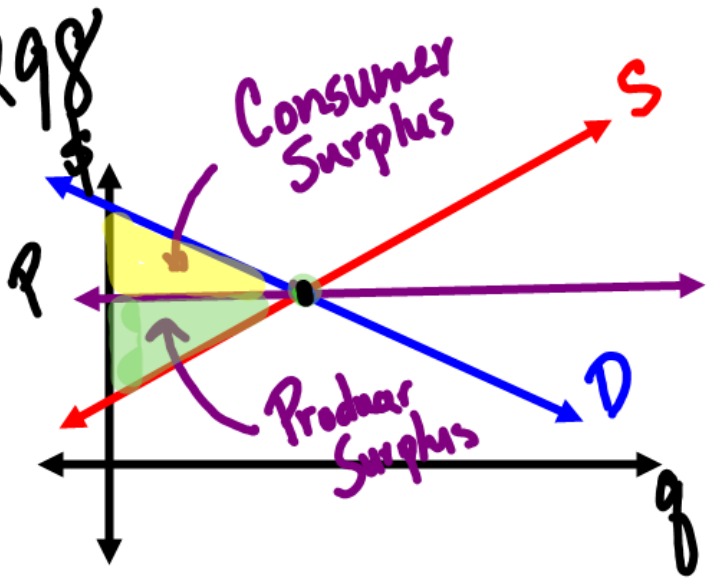
-10

Y

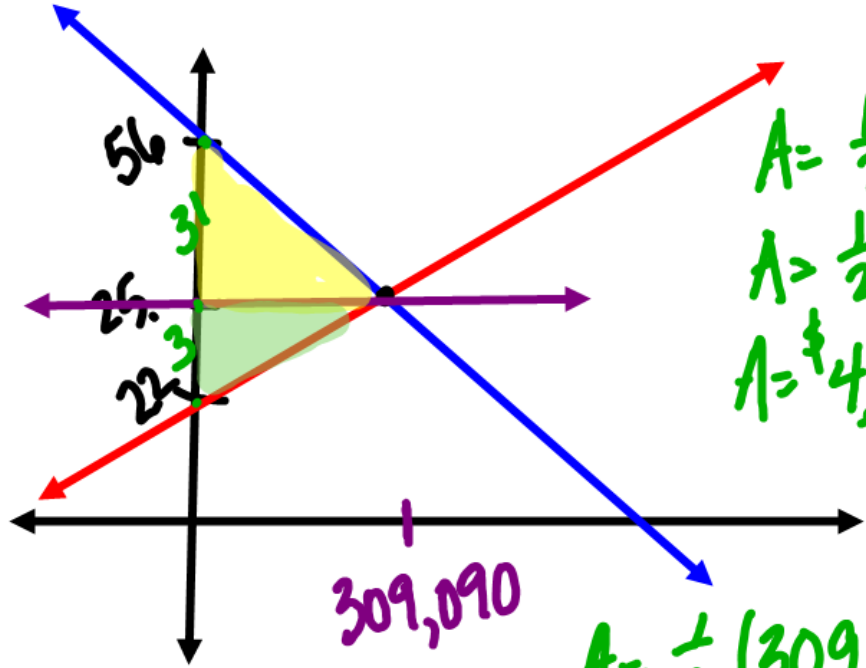


49. p298

p295



49.



$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(309,090)(31)$$

$$A = \$4,790,895$$

$$A = \frac{1}{2}(309,090)(3)$$

$$A = \$463,635$$

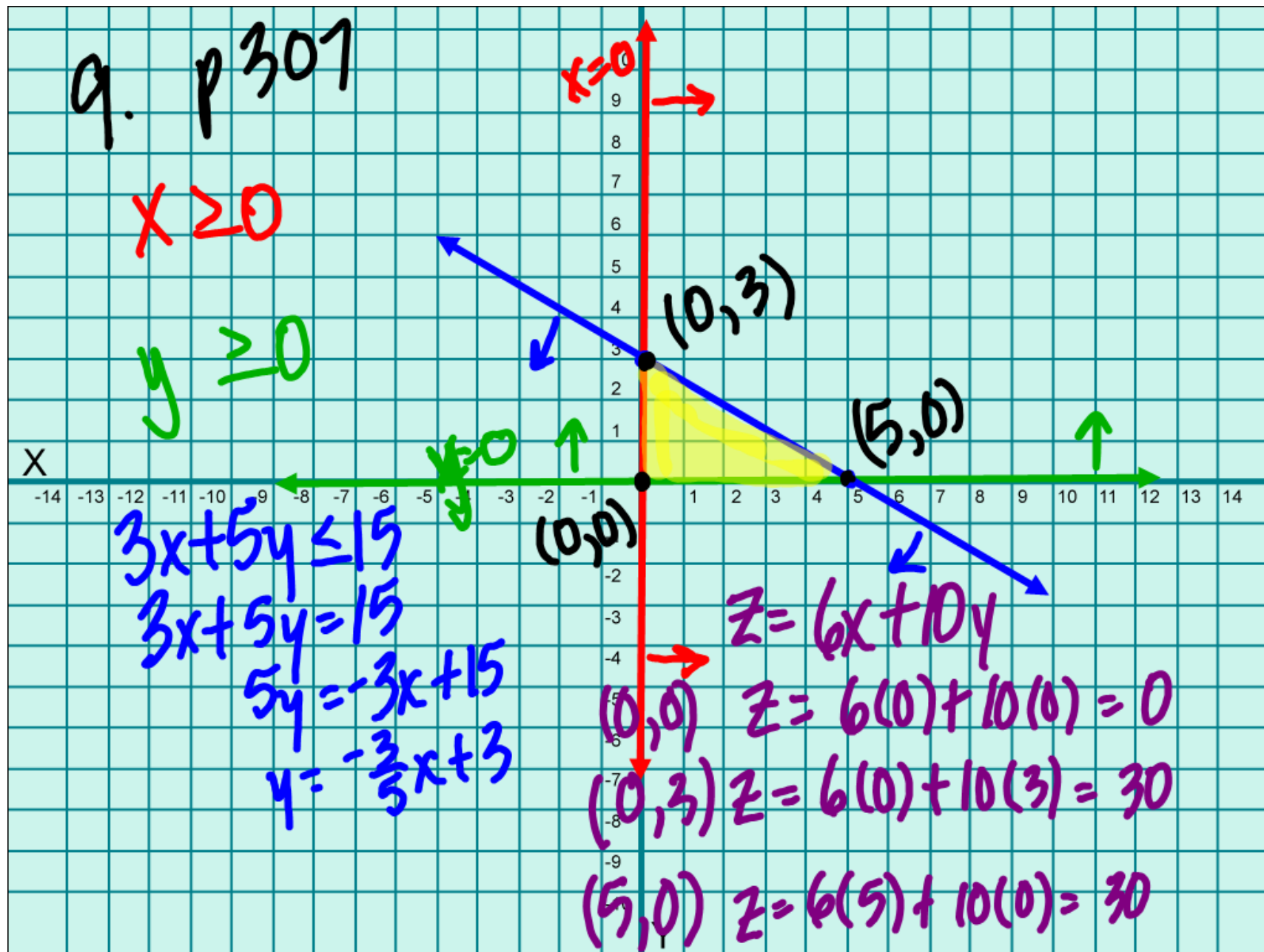
4.5 Linear Programming

Constraints - Inequalities
graph
Shaded region

Corner Points

Substitute into

Objective Function



Max. 30
 Min 0

53. p298

$$x + y \leq 30,000$$

$$y = -x + 30,000$$

$$x \geq 6000$$

$$y \geq 6000$$

$$x \geq 2y \rightarrow y \leq \frac{1}{2}x$$

