Section 4.3 Exercises Part A

1. Three types of horses are in a local ranch. There are 8 more than twice as many Arabians as Quarter-horses, and 50 more Clydesdales than Quarter-horses. There are a total of 282 horses at the ranch. How many of each kind are there?

2. What is the radius of a cone that has a surface area of 219.91 in^2 and a slant height of 5 in?

3. The perimeter of a rectangle is 120 in. If the length of the rectangle is 3 more than 2 times the width, what are the dimensions of the rectangle?

4. Original Price:\$392.50 Tax: 6% Final Price: 5. Original Price: Tax: 7% Final Price: \$73.90

Fill out the table for each of the following:

6. $2x - 3y = 9$,	7.	$y = \frac{7}{2}x + 2$		
x 5 -4	y				x 2 0	y	
	0				-1	0	
	7					4	

Graph the following lines, and label x and y intercepts.

- 8. 5x + 2y = 109. $y = \frac{4}{7}x - 6$ 10. $y = \frac{8}{3}x$
- **11.** x = 10 **12.** $y = -\frac{3}{7}x + 4$ **13.** 7x y = 14

Find the slope between each pair of points.

- **14.** (8,-2) (7,3)
 15. (8,1) (-5,6)
 16. (-3,-1) (-3,-8)
- **17.** (7,9) (-2,3) **18.** (-5,2) (4,6) **19.** (-6,1) (6,1)

Graph the following lines giving one point and the slope.



26. 5x + 3y = 10 **27**. x + 4y = 9 **28**. y = 7

Preparation

29. Write down 5 equations of lines that have the slope:

$$m = -\frac{3}{8}$$



