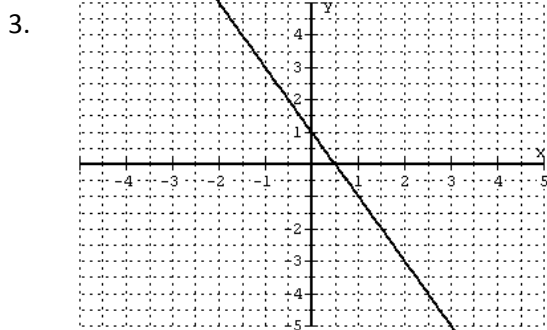


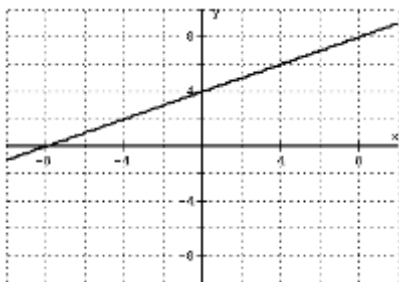
## Answers to Practice Questions for MTE 5 – Linear Equations, Inequalities, and Systems of Equations in Two Variables

1.  $(-3, 2)$
2. b)  $(0, -2)$

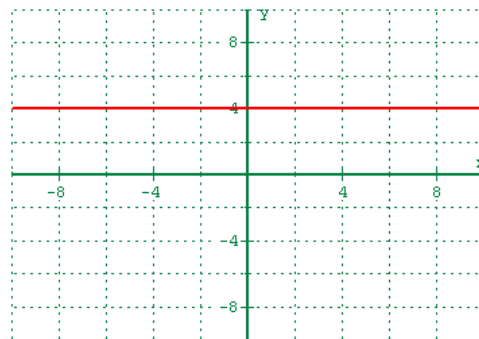


x	-2	-1	0	1	2
$Y = -2x + 1$	5	3	1	-1	-3

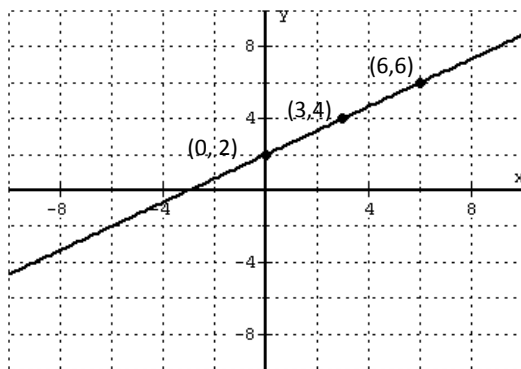
4.  $f(6) = 11$
5. x-int:  $(1, 0)$  y-int:  $(0, -2)$
6. x-int:  $(-8, 0)$  y-int:  $(0, 4)$



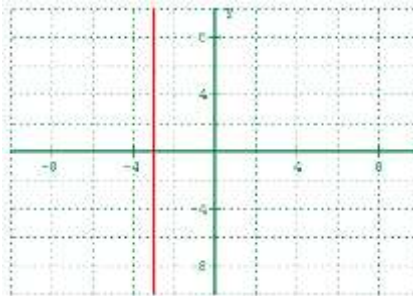
8.  $y = 4$  (horizontal line, slope = 0)



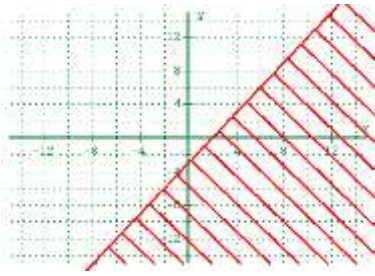
7.  $(0, 2)$   $(3, 4)$   $(6, 6)$  (any three points on the line would be correct—answers will vary)



9.  $x = -3$  (vertical line with undefined slope)



10.  $y \leq \frac{3}{2}x - 3$



11.  $m=3$

12.  $m = -\frac{1}{6}$

13.  $m = -\frac{5}{8}$

14.  $m = 1$

15.  $m$  is undefined

16.  $m = 0$

17.  $y = -\frac{9}{7}x - \frac{4}{9}$

18.  $y = -5x + 20$

19.  $y = -3x - 13$

20.  $x = -5$

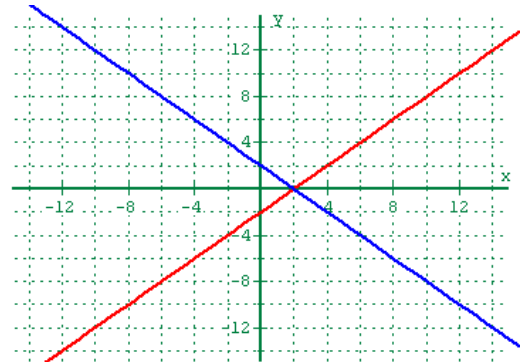
21.  $y = 2$

22.  $y = \frac{5}{6}x - \frac{16}{3}$

23.  $y = -\frac{7}{3}x + \frac{44}{3}$

24.  $(7, -4)$  is the only solution

25.  $(2, 0)$



26.  $(-3, 1)$   $x = -3, y = 1$

27.  $(3, -2)$   $a = 3, b = -2$

28. Consistent and Independent

29.  $f(5)=9, f(-2)=-12, f(2/3)=-4, f(0)=-6,$

$f(6.2)=12.6$

30.  $f(-6)=-4, f(0)=2, f(-2)=0, f(1)=3$

31.  $x=3$ , that is  $f(3) = 4$

32.  $y=1020-85x$

33.  $.035x + .055y = 283;$

$x + y = 5800;$

$y = \$4000$