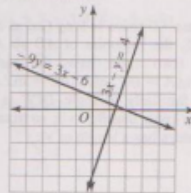


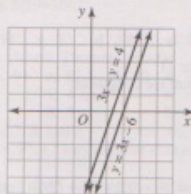
Review Exercises (pages 973-975)

- |   |                                    |                          |
|---|------------------------------------|--------------------------|
| 1. $22i$  | 2. 0                               | 3. -50                   |
| 4. $4i\sqrt{3}$   | 5. $12 + 5i$                       | 6. $-19 - 4i$            |
| 7. $41 + i$   | 8. $7 - 24i$                       | 9. $22 - 7i$             |
| 10. $1 + 4i$  | 11. 52                             | 12. $3i$                 |
| 13. -4  | 14. -8                             | 15. 83                   |
| 16. $\frac{2}{5} - \frac{1}{5}i$                                    | 17. True                           | 18. False                |
| 19. $3 \pm i$   | 20. $-5 \pm i$                     | 21. $2 \pm 5i$           |
| 22. $6 \pm 2i$  | 23. $\frac{3}{2} \pm \frac{1}{2}i$ | 24. $0 \pm \frac{7}{4}i$ |
| 25. 6   | 26. 4                              | 27. 2                    |
| 28. $x^2 + 36 = 0$  |                                    |                          |
| 29. $x^2 + 5x - 24 = 0$   |                                    |                          |
| 30. $x^2 - \frac{2}{3}x - \frac{8}{9} = 0$ , or $9x^2 - 6x + 8 = 0$ |                                    |                          |
| 31. $x^2 - 4x + 20 = 0$   |                                    |                          |
| 32. (3)   | 33. (2)                            | 34. (2)                  |
| 35. (3)   | 36. (2)                            | 37. (1)                  |
| 38. (2)   | 39. (2)                            | 40. (3)                  |

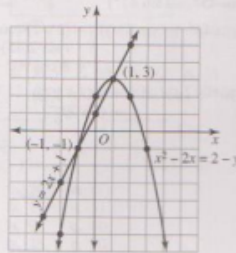
41. (3)    42. (2)    43. (1)    44. (3)  
 45. a.  $k = -9$ , real numbers



- b.  $k = 1$ , real numbers



46. a.  $(-1, -1), (1, 3)$



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

c. Checks for  $(-1, -1)$

$x^2 - 2x = 2 - y$	$y = 2x + 1$
$(-1)^2 - 2(-1) \stackrel{?}{=} 2 - (-1)$	$(-1) \stackrel{?}{=} 2(-1) + 1$
$1 + 2 \stackrel{?}{=} 2 + 1$	$-1 \stackrel{?}{=} -2 + 1$
$3 = 3 \checkmark$	$-1 = -1 \checkmark$

Checks for  $(1, 3)$

$x^2 - 2x = 2 - y$	$y = 2x + 1$
$(1)^2 - 2(1) \stackrel{?}{=} 2 - (3)$	$(3) \stackrel{?}{=} 2(1) + 1$
$1 - 2 \stackrel{?}{=} 2 - 3$	$3 \stackrel{?}{=} 2 + 1$
$-1 = -1 \checkmark$	$3 = 3 \checkmark$

**Pg 961**  
**#41 5**  
**#43 3**