

# Algebra 1 Second Semester Review Answer Key

1. Rational

2. D

3.  $5\sqrt{7}$

4.  $\frac{3}{4}$

5.  $\sqrt{3}$

6.  $9\sqrt{2}$

7.  $36x + 4$

8.  $x^2 - 8x + 12$

9.  $p^2 - 4p + 4$

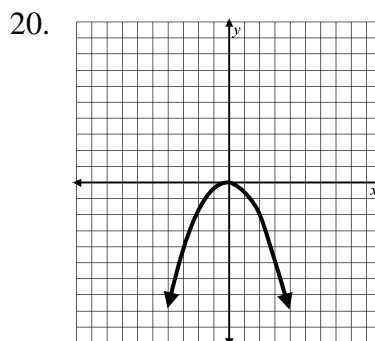
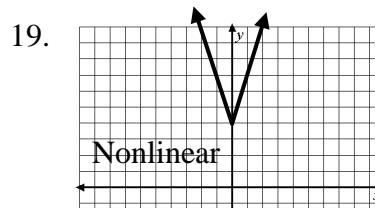
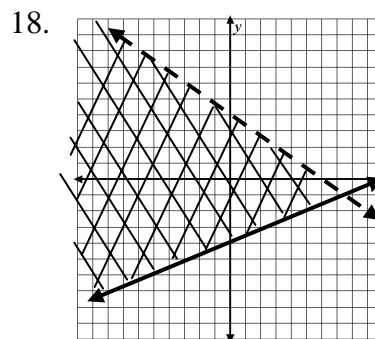
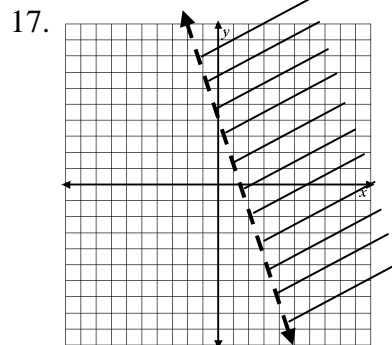
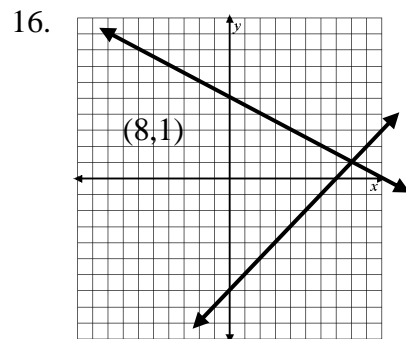
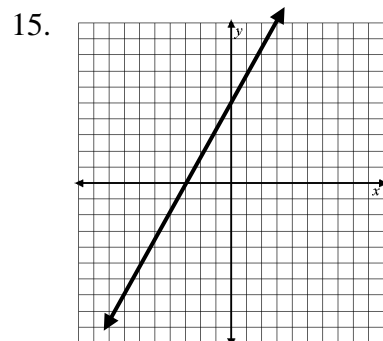
10.  $16t^2 - 49$

11.  $6x^2 + 19x + 8$

12.  $x = \frac{1}{4}, y = -5$

13.  $x = 4, y = 3$

14. A



21. A

22. A

23. C

24.  $x = \pm 8$

25.  $x = \frac{5}{2}, x = -5$

26.  $x = 3$

27.  $-23$

28. D

## Algebra 1 Second Semester Review Answer Key

29. B
30. 1
31. C
32. B
33. D
34.  $-2$
35. B
36.  $\frac{1}{16}$
37.  $\frac{64}{9}$
38. D
39.  $-10x^6y^5$
40.  $\frac{-24x^5}{y^7}$
41. B
42.  $p^{18}r^{27}$
43. B
44. D
45. A
46.  $\frac{a^8}{7b^{14}}$
47.  $\frac{b^{10}}{6a^{15}}$
48. D
49. A
50.  $-3x^2 - 5x + 9$
51.  $4x^2 - 7x + 6$
52.  $2x^4 - 5x - 5$
53.  $-2x^2 + 8x - 2$
54.  $10x^5 + 8x^3y$
55.  $3n^3 + 7n^2 - 38n + 30$
56.  $5c^3 - 8c^2 - 11c + 14$
57.  $4x(x^2 - 2x + 3)$
58.  $2x^3(4 - 3x^3)$
59.  $(x - 2)(x - 1)$
60.  $(x - 3)(x + 9)$
61.  $(3x + 2)(4x + 9)$
62.  $(3x - 4)(6x + 7)$
63.  $x = 0$  or  $x = \frac{8}{5}$
64.  $x = \frac{8}{9}$  or  $x = -2$
65.  $h = 0$  or  $h = -\frac{5}{2}$
66.  $x = -4$  or  $x = -\frac{1}{2}$
67.  $x = -5$  or  $x = \frac{1}{3}$
68.  $y = \frac{20}{x}$  (OMIT)
69.  $y = \frac{18}{x}$  (OMIT)
70.  $x = 77$  (OMIT)
71.  $x = 7$  (OMIT)
72.  $t = 1$  (OMIT)
73.  $t = \frac{A}{4s^2}$  (OMIT)
74. B (OMIT)
75.  $hj + j = i$  (OMIT)
76.  $\frac{2+r}{5}$  (OMIT)
77.  $\frac{n}{5}$  (OMIT)
78.  $x = 34$
79. A
80. 28.7m
81. 400 adult; 100 student
82.  $x \approx \pm 3.16$
83.  $x = \frac{5}{2}$  or  $x = -5$
84. \$345.43
85. a.  $y = 300,000(0.96)^x$   
b. 225,434.24 hundred  $ft^3$
86. a. 9.1 grams  
b. 0.87 grams
87. a.  $t = 0$  or  $t = 3.5$  seconds  
b.  $t = 1$  or  $t = 2.5$  seconds
88. \$24.37 (OMIT)