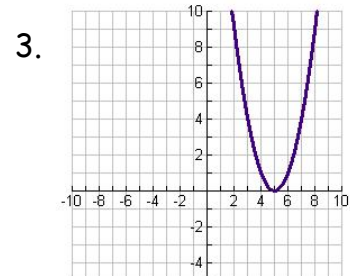
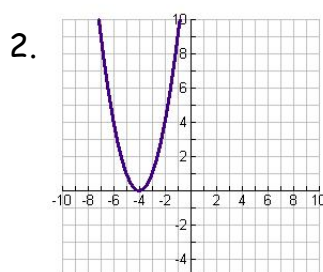
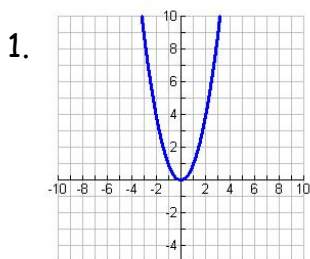
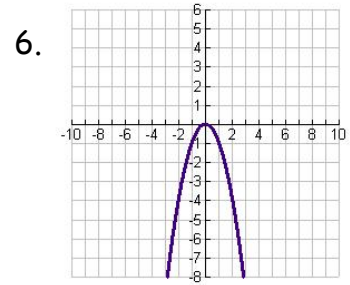
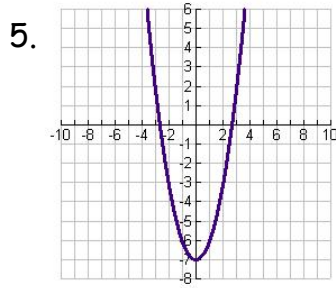
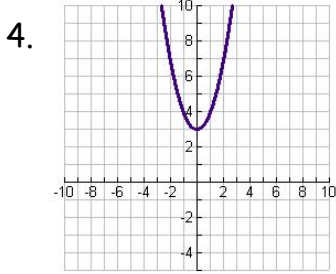


## Answers Algebra I Problem Set 96

1.  $2\sqrt{3}$       2.  $2\sqrt{5}$       3.  $4\sqrt{2}$       4.  $\frac{3\sqrt{6}}{2}$       5.  $\frac{\sqrt{3}}{3}$
6.  $\frac{\sqrt{10}}{5}$       7.  $\frac{\sqrt{30}}{6}$       8.  $\frac{\sqrt{3}}{2}$       9. Qtr = 6, Dimes = 13
10. Qtr = 100, Dimes = 500      11. Qtr = 200, Nickels = 250
12. Smaller = 47, Larger = 53      13. Choc. Chip = 40 lbs., Sugar = 30 lbs.
14. Width = 31 in, Length = 34 in.      15.  $x = -2, 7$       16.  $x = 1, -\frac{2}{5}$
17.  $x = -5 \pm \sqrt{29}$       18.  $x = 6 \pm \sqrt{43}$       19.  $x = \pm \frac{3}{4}$
20.  $x = 5, \frac{5}{4}$       21.  $x = 0, 6, -\frac{1}{2}$       22a]  $\frac{48}{2197}$       b]  $\frac{7}{325}$
23.  $\frac{5}{324}$       24.  $\text{Vol} = \frac{256\pi}{3} \approx 268.083$ ,  $\text{SA} = 64\pi \approx 201.062$
25.  $\frac{x-4}{2x(x+3)}$       26.  $y = \frac{3}{4}$       27.  $2.1 \times 10^3 = 2100$
28.  $364\sqrt{2}$       29.  $p = \sqrt{146} \approx 12.083$       30A]  $x = -5$       B]  $y = 6$   
C]  $y = \frac{1}{4}x - 3$

## Answers Algebra I Problem Set 97





7.  $\frac{\sqrt{5}}{2}$

8.  $4\sqrt{2}$

9.  $4\sqrt{3}$

10.  $\frac{2\sqrt{5}}{5}$

11.  $\frac{\sqrt{110}}{11}$

12.  $3\sqrt{15}$

13.  $11\sqrt{2}$

14.  $3\sqrt{10}$

15.  $-8\sqrt{15}$

16. Length = 24 cm, Width = 18 cm.

17. 56 and 45

18. tennis = \$.50 each, golf = \$1.10 each

19. Nickels = 60, Dimes = 20

20.  $x = \frac{1 \pm \sqrt{29}}{2}$

21.  $x = -2, 3$

22.  $x = -5 \pm \sqrt{19}$

23.  $x = -2, 8$

24.  $x = -\frac{3}{2}, 7$

25.  $x = \frac{1}{3}, -2$

26.  $18x^2 + 13x + 2$

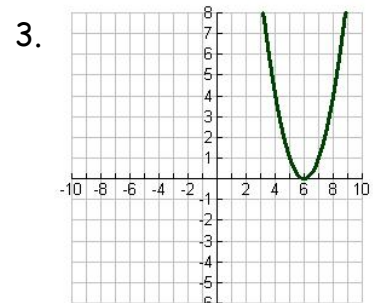
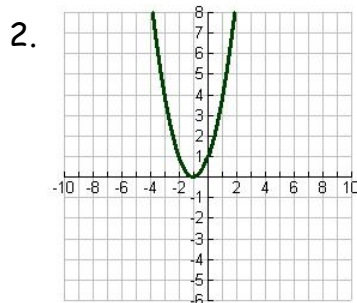
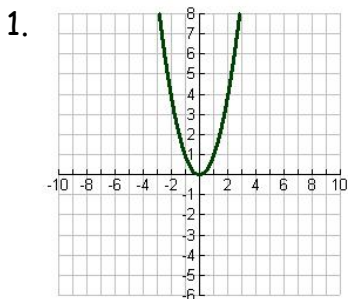
27.  $-2x^2 + 11x + 7$

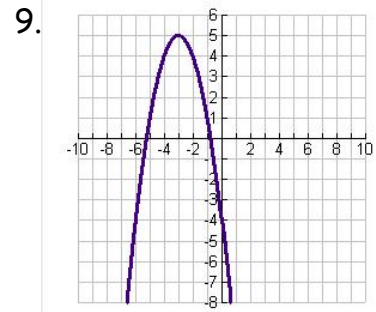
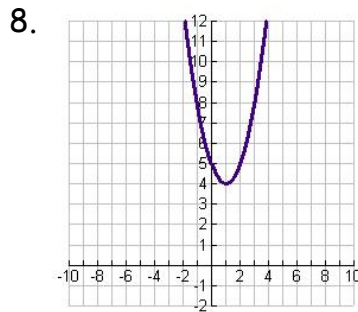
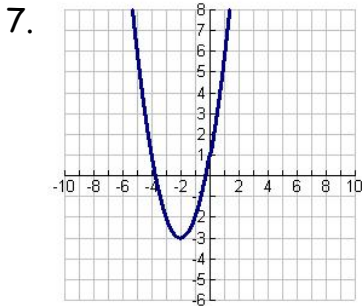
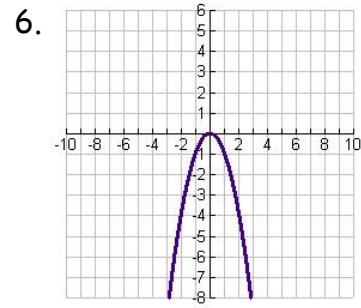
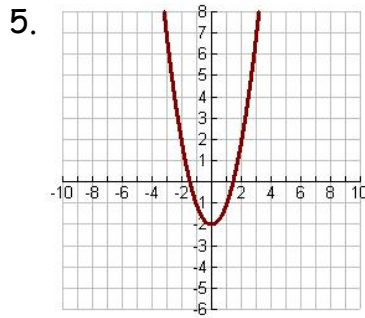
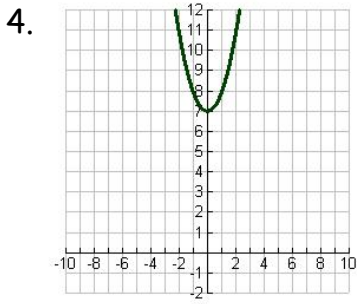
28.  $\text{Vol} = 240\pi \approx 753.982 \text{ cm}^3$ ,  $\text{SA} = 152\pi \approx 477.522 \text{ cm}^2$

29.  $y = 3x - 1$

30.  $x = \frac{135}{2}$

## Answers Algebra I Problem Set 98





10.  $\frac{6\sqrt{5} + \sqrt{10}}{5}$

11.  $4\sqrt{3}$

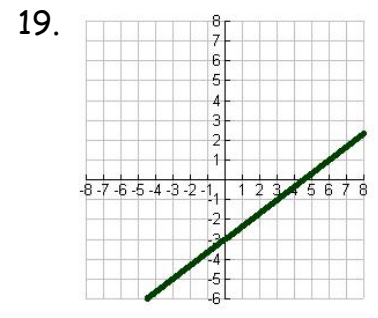
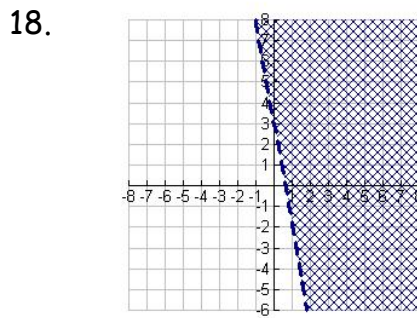
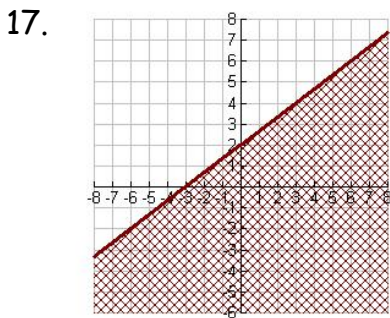
12.  $\frac{\sqrt{10}}{5}$

13.  $\frac{2\sqrt{2} + \sqrt{10}}{4}$

14. Width = 21 cm, Length = 30 cm

15. Expensive = 32, Cheap = 40

16. Nickels = 105, Pennies = 95



20.  $x = -2, 6$

21.  $x = \frac{1}{3}, -6$

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

23.  $x = -6 \pm \sqrt{30}$

24.  $x = \frac{-7 \pm \sqrt{97}}{8}$

25.  $x = \frac{-3 \pm \sqrt{17}}{2}$

26. 960 cups

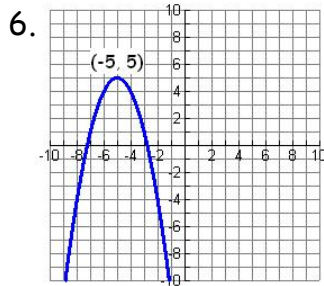
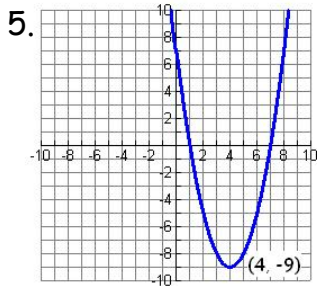
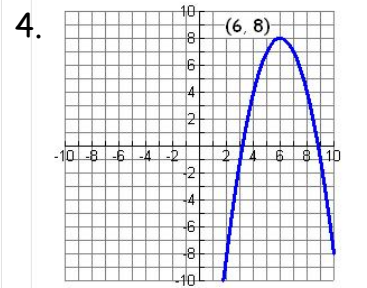
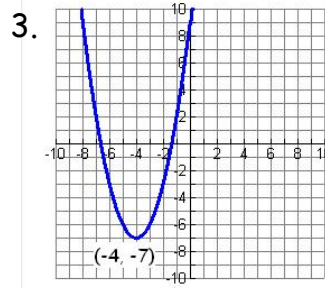
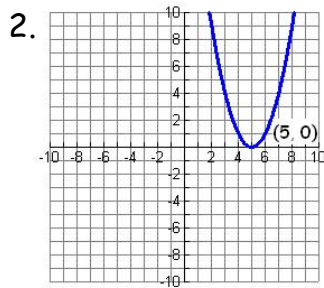
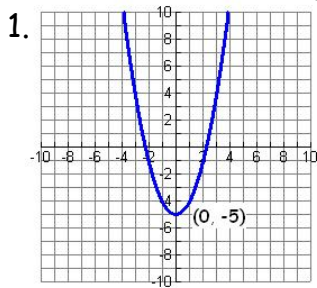
27.  $\frac{600(5280)^2(12)^2(2.54)^2}{100^2} = 1,553,992,866 \text{ sqmeters}$

28.  $\frac{2y^3}{3}$

29.  $-3a^7b^7$

30.  $3x^2 + 11x - 10$

# Answers Algebra I Problem Set 99



7. 80 ft, 2 sec

8. 150 ft, 3 sec

9. 110 ft, 2.5 sec

10. 215 ft, 3.5 sec

11.  $x = -\frac{7}{3}, \frac{7}{3}$

12.  $x = 5, 8$

13.  $x = -4 \pm \sqrt{2}$

14.  $x = -\frac{3}{2}, 4$

15.  $x = -1, \frac{1}{3}$

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

17. 2 sec

18. 3.562 sec

19. 3 sec

20. 1.618 sec

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

22.  $\frac{\sqrt{14}}{4}$

23.  $\frac{2\sqrt{3} + \sqrt{6}}{3}$

24.  $\frac{4x^3}{y^3}$

25. 13 dimes

26. 42 soup

17 quarters

58 spaghetti

27.  $\frac{-7x - 1}{x(x^2 - 1)}$

28.  $4x^2 - 28x + 2$

29.  $x = -\frac{47}{27}$

30.  $x = -\frac{4}{9}$

# Answers Algebra I Problem Set 100

1.  $R_1 = 40$  mph  
 $R_2 = 32$  mph

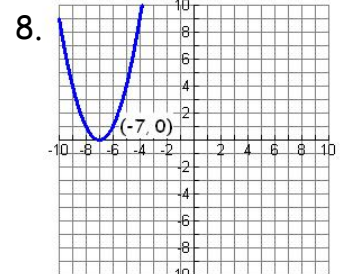
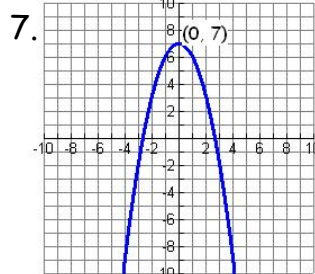
2. 24 miles

3. 40 mph

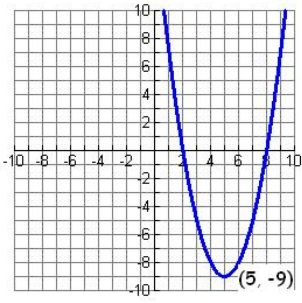
4.  $R_J = 400$  mph  
 $R_P = 250$  mph  
2000 miles

5. 5 hours

6. 144 miles



9.



10. 42 ft, 1.5 sec

11. 145 ft, 3 sec

12.  $x = -9, 6$

13.  $x = -2 \pm 2\sqrt{6}$

14.  $x = \frac{-1 \pm \sqrt{41}}{4}$

15. 5 sec

16. 0.618 sec