

- This exam is to be completed in the allotted time period of 2 hours.
- There will only be 22 problems on the actual final exam.
- Read each question carefully.
- Credit may not be given without sufficient supporting work.
- Simplify answers when possible.
- The use of cell phones, books, or notes are not permitted while taking this exam.
- Approved calculators are allowed.

1. [4 points] Factor  $9x^2 - 6x - 8$ .
  
  
  
  
  
  
  
  
  
  
2. [4 points] Factor  $w^2 - 5w + 6$ .
  
  
  
  
  
  
  
  
  
  
3. [4 points] Factor  $5nz - n - 5mz + m$ .
  
  
  
  
  
  
  
  
  
  
4. [4 points] Completely factor  $cx^2 + dx^2 - 4c - 4d$ .
  
  
  
  
  
  
  
  
  
  
5. [5 points] Simplify  $\frac{x^3 - 9x^2}{x^2 - 7x - 18}$ .
  
  
  
  
  
  
  
  
  
  
6. [5 points] Simplify  $\frac{t^2 - 7t + 12}{2t^2 - 4t - 16}$ .

7. [5 points] Simplify  $\frac{16x^3}{12x^2 - 12} \div \frac{8x^2}{x^2 - 2x + 1}$ .

8. [5 points] Simplify  $\frac{15x^3}{5x - 10} \div \frac{10x}{(x - 2)(x + 2)}$ .

9. [5 points] Simplify  $\frac{2}{x - 6} - \frac{x}{x + 2}$

10. [5 points] Simplify  $\frac{5n}{n^2 - 9} - \frac{4}{n - 3}$

11. [5 points] Simplify  $\frac{7x - 16}{x^2 - 5x + 6} + \frac{x + 2}{x^2 - 6x + 8}$ .

12. [5 points] Simplify  $\frac{4x + 5}{x^2 + 7x + 6} + \frac{-x + 4}{4x + 24}$ .

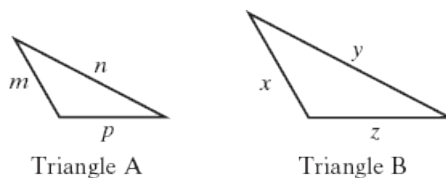
13. [4 points] Simplify  $\frac{\frac{a}{5b} - \frac{1}{4}}{\frac{7}{5b} - \frac{3}{a}}$ .

14. [4 points] Simplify  $\frac{\frac{7}{x}}{\frac{3}{x} + \frac{8}{x^2}}$ .

15. [4 points] Solve  $\frac{4}{x^2 - 1} + \frac{7}{x + 1} = \frac{5}{x - 1}$ .

16. [4 points] Solve  $\frac{11}{4} = \frac{3x + 2}{x + 9} + 6$ .

17. [4 points] Triangles A and B are similar.



If  $x = 21$  in.,  $y = 29$  in., and  $m = 17$  in., find the length of side  $n$ . Leave your answer as a fraction.

18. [4 points] A contractor estimated that 20 square feet of window space will be allowed for every 210 square feet of floor space. Using this estimate, how much window space will be allowed for 4200 square feet of floor space?

19. [4 points] Combine. Assume that all variables represent nonnegative real numbers.

$$\sqrt{63x} - \sqrt{54x} + \sqrt{24x}$$

20. [4 points] Combine. Assume that all variables represent nonnegative real numbers.  
 $\sqrt{180x} - 5\sqrt{63x} - \sqrt{80x}.$

21. [4 points] Let  $C(w) = \frac{1}{2}w - 6$ . Find  $C(10)$  and  $C(a + 3)$ . Be sure to simplify your answers.

22. [4 points] Let  $h(t) = 4t^2 - 2t + 5$ . Find  $h(4)$  and  $h(-1)$ . Be sure to simplify your answers.

23. [4 points] Solve  $\sqrt{x + 9} - 9 = x$ .

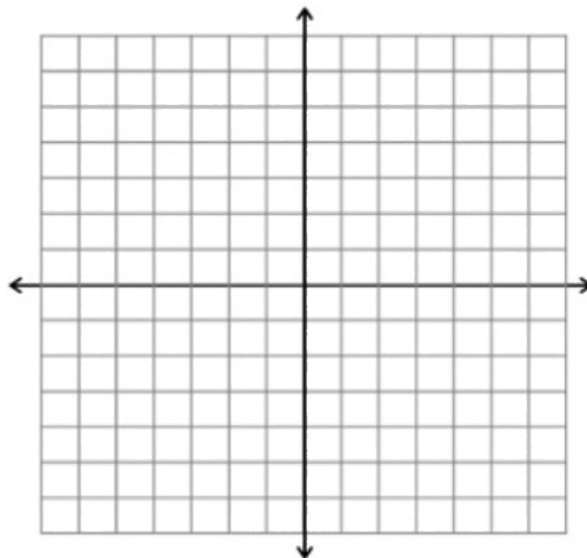
24. [4 points] Solve  $\sqrt{8x + 17} - 2 = 9$ .

25. [4 points] Simplify  $\sqrt{-25}$ .
26. [4 points] Simplify  $10 + \sqrt{-50}$ .
27. [6 points]  $y$  varies directly as  $x$  and inversely as the square of  $z$ . If  $y = 84$  when  $x = 64$  and  $z = 4$ , find  $y$  when  $x = 12$  and  $z = 2$ .
28. [6 points] A patient has an insurance policy that requires a copayment that varies directly with her medical expenses. Her last bill listed her expenses at \$1289 with a copayment of \$154.68.
- (a) Write an equation relating her copayment to her medical expenses.
  - (b) Find her copayment for medical expenses totalling \$2000.
29. [4 points] Solve by using the square root property.  $(2x + 7)^2 = 121$ .
30. [4 points] Solve by using the square root property.  $(2x - 10)^2 = 7$ .

31. [4 points] A company that manufactures bikes makes a daily profit,  $P$ , according to the equation  $P(x) = -100x^2 + 4200x - 43371$  where  $P$  is measured in dollars and  $x$  is the number of mountain bikes made per day. Find the number of mountain bikes that must be made each day to produce a zero profit for the company. Round your answer to the nearest whole number.
32. [4 points] The Gullfoss (waterfalls) in Iceland have a height of 104 feet. A pebble is thrown upward from the top of the falls with an initial velocity of 25 feet per second. The height of the pebble after  $t$  seconds is given by the equation  $h = 16t^2 + 25t + 104$ . How long after the pebble is thrown will it be 52 feet from the ground? Round to the nearest tenth of a second.
33. [4 points] A monitor at Bulls-eye's electronics is listed as being 20 inches. This distance is the diagonal distance across the screen. If the monitor has a square screen, what is the width of the screen? Keep answers in simplified radical form.
34. [4 points] A brace for a shelf has the shape of a right triangle. Its hypotenuse is 20 inches long and one of the legs is 14 inches long. How long is the other leg of the triangle? Keep answers in simplified radical form.

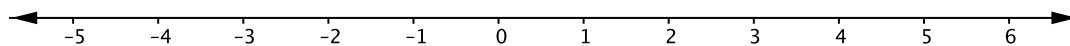


35. [8 points] Given  $f(x) = x^2 - 4x + 3$ . Identify the vertex,  $y$ -intercept,  $x$ -intercept(s), axis of symmetry. In order to receive full credit, you must show your work.
36. [8 points] Graph the quadratic function with the characteristics below. Be sure to label the appropriate points on the graph.
- Vertex:  $(2, 5)$
  - $y$ -intercept:  $y = 4.2$
  - $x$ -intercepts:  $x = -3, 7$
  - Axis of symmetry:  $x = 2$



37. [4 points] Solve  $|x + 2| - 1 = 6$ .

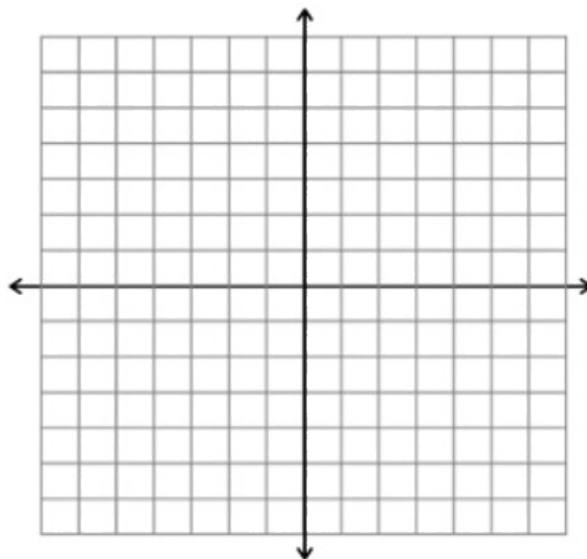
38. [4 points] Solve  $|7x + 1| \geq 3$  and graph the solution on the number line below.



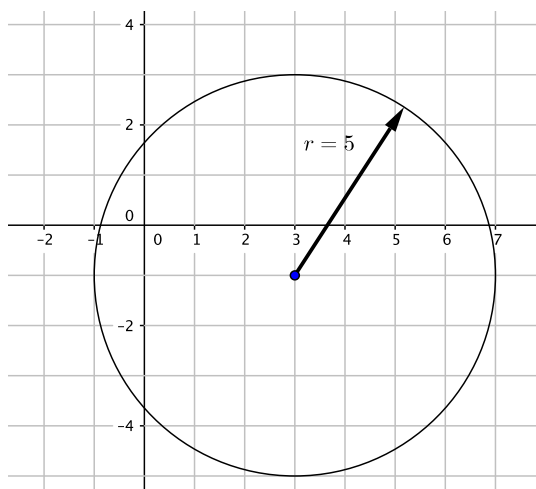
39. [4 points] Find the distance between  $(3, -6)$  and  $(-1, -9)$ .

40. [4 points] Find the distance between  $(7, 3)$  and  $(1, 10)$ .

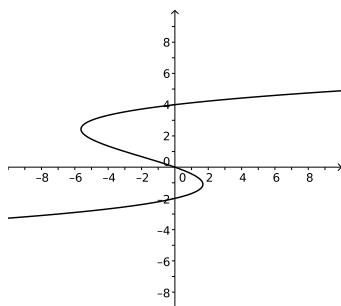
41. [6 points] Find the center and radius, and graph the circle  $(x + 4)^2 + (y - 1)^2 = 9$ .



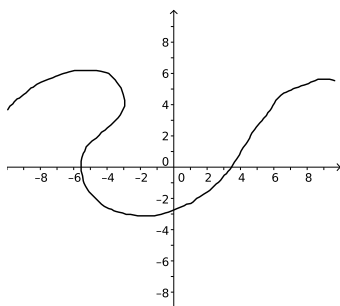
42. [6 points] Find the equation of the circle graphed below.



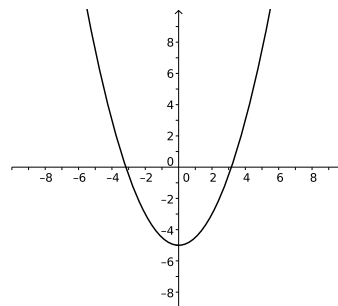
43. [4 points] Determine whether each graph represents a function.



Yes or No



Yes or No



Yes or No

44. [4 points] Each table below contains some data pertaining to a function. Identify the domain and range for each.

(a) Wide Receivers on SCSU's Football Team:

Jersey Number	80	84	85	88
Weight (in lbs.)	200	193	200	207

(b) Towns in Connecticut:

Area Code	203	860	203
ZIP Code	06437	06117	06515

## Solutions

1. Factor  $9x^2 - 6x - 8$ .

$9x^2 - 12x + 6x - 8$	2 pts to here
$3x(3x - 4) + 2(3x - 4)$	3 pts to here
$(3x + 2)(3x - 4)$	4 pts to here

2. Factor  $w^2 - 5w + 6$ .

$w^2 - 2w - 3w + 6$	2 pts to here
$w(w - 2) - 3(w - 2)$	3 pts to here
$(w - 2)(w - 3)$	4 pts to here

3. Factor  $5nz - n - 5mz + m$ .

$n(5z - 1) - m(5z - 1)$	2 pts to here
$(n - m)(5z - 1)$	4 pts to here

4. Completely factor  $cx^2 + dx^2 - 4c - 4d$ .

$x^2(c + d) - 4(c + d)$	2 pts to here
$(x^2 - 4)(c + d)$	3 pts to here
$(x - 2)(x + 2)(c + d)$	4 pts to here

5. Simplify  $\frac{x^3 - 9x^2}{x^2 - 7x - 18}$ .

Partial factoring of only the numerator	2 pts
Partial factoring of only the denominator	2 pts
$\frac{x^2(x - 9)}{(x - 9)(x + 2)}$	4 pts to here
$\frac{x^2}{x + 2}$	5 pts to here

6. Simplify  $\frac{t^2 - 7t + 12}{2t^2 - 4t - 16}$ .

Partial factoring of only the numerator	2 pt
Partial factoring of only the denominator	2 pts
$\frac{(t - 3)(t - 4)}{2(t + 2)(t - 4)}$	4 pts to here
$\frac{t - 3}{2(t + 2)}$	5 pts to here

7. Simplify  $\frac{16x^3}{12x^2 - 12} \div \frac{8x^2}{x^2 - 2x + 1}$ .

Factoring of equivalent of one rational expression	1 pt
$\frac{16x^3}{12(x+1)(x-1)} \div \frac{8x^2}{(x-1)^2}$	2 pts to here
$\frac{16x^3}{12(x+1)(x-1)} \times \frac{(x-1)^2}{8x^2}$	4 pts to here
$\frac{x(x-1)}{6(x+1)}$	5 pts to here

8. Simplify  $\frac{15x^3}{5x-10} \div \frac{10x}{(x-2)(x+2)}$ .

$\frac{15x^3}{5(x-2)} \div \frac{10x}{(x-2)(x+2)}$	1 pt
$\frac{15x^3}{5(x-2)} \times \frac{10x}{(x-2)(x+2)}$	3 pts to here
$\frac{3x^2(x+2)}{10}$	5 pts to here

9. Simplify  $\frac{2}{x-6} - \frac{x}{x+2}$

$\frac{2(x+2)}{(x-6)(x+2)} - \frac{x(x-6)}{(x-6)(x+2)}$	2 pts to here
$\frac{2(x+2)-x(x-6)}{(x-6)(x+2)}$	3 pts to here
$\frac{2x+4-x^2+6x}{(x-6)(x+2)}$	4 pts to here
$\frac{-x^2+8x+4}{(x-6)(x+2)}$	5 pts to here

10. Simplify  $\frac{5n}{n^2-9} - \frac{4}{n-3}$

$\frac{5n}{(n-3)(n+3)} - \frac{4}{(n-3)}$	1 pts to here
$\frac{5n}{(n-3)(n+3)} - \frac{4(n+3)}{(n-3)(n+3)}$	2 pts to here
$\frac{5n-4n-12}{(n-3)(n+3)}$	4 pts to here
$\frac{n-12}{(n-3)(n+3)}$	5 pts to here

11. Simplify  $\frac{7x-16}{x^2-5x+6} + \frac{x+2}{x^2-6x+8}$ .

$\frac{(7x-16)(x-4)}{(x-3)(x-2)(x-4)} + \frac{(x+2)(x-3)}{(x-4)(x-2)(x-3)}$	2 pts
$\frac{7x^2-44x+64+x^2-x-6}{(x-2)(x-4)(x-3)}$	3 pts to here
$\frac{8x^2-45x+58}{(x-2)(x-4)(x-3)}$	4 pts to here
$\frac{8x-29}{(x-4)(x-3)}$	5 pts to here

12. Simplify  $\frac{4x+5}{x^2+7x+6} + \frac{-x+4}{4x+24}$ .

$\frac{(4x+5)}{(x+6)(x+1)} + \frac{(-x+4)}{4(x+6)}$	2 pts
$\frac{4(4x+5)}{4(x+6)(x+1)} + \frac{(-x+4)(x+1)}{4(x+6)(x+1)}$	3 pts to here
$\frac{16x+20-x^2+3x+4}{4(x+6)(x+1)}$	4 pts to here
$\frac{-x^2+19x+24}{4(x+6)(x+1)}$	5 pts to here

13. Simplify  $\frac{\frac{a}{5b} - \frac{1}{4}}{\frac{7}{3} - \frac{a}{5b}}$ .

Method 1

$$\frac{20ab}{20ab} \left( \frac{\frac{a}{5b} - \frac{1}{4}}{\frac{7}{3} - \frac{a}{5b}} \right) \quad \text{2 pts to here}$$

$$\frac{4a^2 - 5ab}{28a - 60b} \quad \text{4 pts to here}$$

Method 2

$$\frac{4a}{20b} - \frac{5b}{20b} \quad \text{1 pt to here}$$

$$\frac{5ab}{4a - 5b} - \frac{5ab}{5b} \quad \text{2 pts to here}$$

$$\frac{5ab}{4a - 5b} \times \frac{5ab}{7a - 15b} \quad \text{3 pts to here}$$

$$\frac{a(4a - 5b)}{4(7a - 15b)} \text{ or } \frac{4a^2 - 5ab}{28a - 60b} \quad \text{4 pts to here}$$

14. Simplify  $\frac{\frac{7}{x}}{\frac{3}{x} + \frac{8}{x^2}}$ .

Method 1	
$\frac{x^2}{x^2} \left( \frac{\frac{7}{x}}{\frac{3}{x} + \frac{8}{x^2}} \right)$	2 pts to here
$\frac{7x}{3x+8}$	4 pts to here
Method 2	
$\frac{\frac{7}{x}}{\frac{3x}{x^2} + \frac{8}{x^2}}$	1 pt to here
$\frac{7}{3x+8}$	2 pts to here
$\frac{7}{x} \times \frac{x^2}{3x+8}$	3 pts to here
$\frac{7x}{3x+8}$	4 pts to here

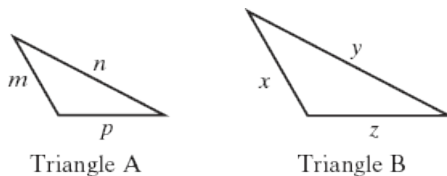
15. Solve  $\frac{4}{x^2-1} + \frac{7}{x+1} = \frac{5}{x-1}$ .

$4 + 7(x-1) = 5(x+1)$	2 pts to here
$7x - 3 = 5x + 5$	3 pts to here
$x = 4$	4 pts to here

16. Solve  $\frac{11}{4} = \frac{3x+2}{x+9} + 6$ .

$11(x+9) = 4(3x+2) + 4(6)(x+9)$	1 pts to here
$11x + 99 = 12x + 8 + 24x + 216$	2 pts to here
$11x + 99 = 36x + 224$	3 pts to here
$-5 = x$	4 pts to here

17. Triangles A and B are similar.



If  $x = 21$  in.,  $y = 29$  in., and  $m = 17$  in., find the length of side  $n$ . Leave your answer as a fraction.

$\frac{17}{21} = \frac{n}{29} \text{ or } \frac{17}{n} = \frac{21}{29} \text{ or } \frac{21}{17} = \frac{29}{n} \text{ or } \frac{n}{17} = \frac{29}{21}$	2 pts to here
$n = \frac{493}{21} \text{ inches or } n = 23\frac{10}{21} \text{ inches}$	4 pts to here
(3 pts for correct solution, but no units are given)	

18. A contractor estimated that 20 square feet of window space will be allowed for every 210 square feet of floor space. Using this estimate, how much window space will be allowed for 4200 square feet of floor space?

$\frac{x}{4200} = \frac{20}{210} \text{ or } \frac{x}{20} = \frac{4200}{210} \text{ or } \frac{20}{210} = \frac{x}{4200}$	2 pts to here
$210x = 84000$	3 pts to here
$x = 400 \text{ square feet}$	4 pts to here
(3 pts for correct solution, but no units are given)	

19. Combine. Assume that all variables represent nonnegative real numbers.

$$\sqrt{63x} - \sqrt{54x} + \sqrt{24x}$$

$3\sqrt{7x} - 3\sqrt{6x} + 2\sqrt{6x}$	2 pts to here
$3\sqrt{7x} - \sqrt{6x}$	4 pts to here

20. Combine. Assume that all variables represent nonnegative real numbers.

$$\sqrt{180x} - 5\sqrt{63x} - \sqrt{80x}.$$

$6\sqrt{5x} - 15\sqrt{7x} - 4\sqrt{5x}$	2 pts to here
$2\sqrt{5x} - 15\sqrt{7x}$	4 pts to here

21. Let  $C(w) = \frac{1}{2}w - 6$ . Find  $C(10)$  and  $C(a+3)$ . Be sure to simplify your answers.

$C(10) = -1$	2 pts
$C(a+3) = \frac{1}{2}(a+3) - 6$	1 additional point
$C(a+3) = \frac{1}{2}a - \frac{9}{2}$	1 additional point

22. Let  $h(t) = 4t^2 - 2t + 5$ . Find  $h(4)$  and  $h(-1)$ . Be sure to simplify your answers.

$h(4) = 61$	2 pts
$h(-1) = 4(-1)^2 - 2(-1) + 5$	1 additional point
$h(-1) = 11$	1 additional point

23. Solve  $\sqrt{x+9} - 9 = x$ .

$\sqrt{x+9} = x+9$	
$x+9 = x^2 + 18x + 81$	1 pt to here
$0 = x^2 + 17x + 72$	2 pts to here
$0 = (x+9)(x+8)$	3 pts to here
$x = -9 \text{ and } x = -8$	4 pts to here



24. Solve  $\sqrt{8x+17} - 2 = 9$ .

$\sqrt{8x+17} = 11$	1 pt to here
$8x+17 = 121$	2 pts to here
$8x = 104$	3 pts to here
$x = 13$	4 pts to here

25. Simplify  $\sqrt{-25}$ .

$\sqrt{-1}\sqrt{25}$	1 pts to here
$5\sqrt{-1}$	2 pts to here or
$i\sqrt{25}$	3 pts to here
$5i$	4 pts to here

26. Simplify  $10 + \sqrt{-50}$ .

$10 + \sqrt{-1}\sqrt{50}$	1 pts to here
$10 + 5\sqrt{-1}\sqrt{2}$	2 pts to here or
$10 + i\sqrt{50}$	3 pts to here
$10 + 5i\sqrt{2}$	4 pts to here

27.  $y$  varies directly as  $x$  and inversely as the square of  $z$ . If  $y = 84$  when  $x = 64$  and  $z = 4$ , find  $y$  when  $x = 12$  and  $z = 2$ .

$y = \frac{kx}{z^2}$	
$84 = \frac{k(64)}{4^2}$	2 pts to here
$84 = 4k$	
$21 = k$	3 pts to here
$y = \frac{21x}{z^2}$	
$y = \frac{21(12)}{2^2}$	5 pts to here
$y = 63$	6 pts to here

28. A patient has an insurance policy that requires a copayment that varies directly with her medical expenses. Her last bill listed her expenses at \$1289 with a copayment of \$154.68.

- (a) Write an equation relating her copayment to her medical expenses.  
 (b) Find her copayment for medical expenses totalling \$2000.

(a) $c = km$	2 pts to here
(a) $c = \frac{154.68}{1289}m$ or $c = 0.12m$	3 pts to here
(b) $c = 0.12(2000)$ or $c = 240$	5 pts to here
(b) \$240	6 pts to here

29. Solve by using the square root property.  $(2x+7)^2 = 121$ .

$2x + 7 = \pm 11$	1 pt to here
$2x = 4$	
$x = 2$	2 pts to here
$2x = -18$	3 pts to here
$x = -9$	4 pts

30. Solve by using the square root property.  $(2x - 10)^2 = 7$ .

$2x - 10 = \pm\sqrt{7}$	1 pt to here
$2x = 10 + \sqrt{7}$	
$x = \frac{10 + \sqrt{7}}{2}$	2 pts to here
$2x = 10 - \sqrt{7}$	3 pts to here
$x = \frac{10 - \sqrt{7}}{2}$	4 pts

31. A company that manufactures bikes makes a daily profit,  $P$ , according to the equation  $P(x) = -100x^2 + 4200x - 43371$  where  $P$  is measured in dollars and  $x$  is the number of mountain bikes made per day. Find the number of mountain bikes that must be made each day to produce a zero profit for the company. Round your answer to the nearest whole number.

$x = \frac{-4200 \pm \sqrt{(4200)^2 - 4(-100)(-43371)}}{2(-100)}$	1 pt to here
$x = \frac{-4200 \pm \sqrt{291600}}{-200}$	2 pts to here
$x = \frac{-4200 + 540}{-200} = 18.3 \approx 18$ bikes	3 pts to here
$x = \frac{-4200 - 540}{-200} = 23.7 \approx 24$ bikes	4 pts to here (3 pts if no units)

32. The Gullfoss (waterfalls) in Iceland have a height of 104 feet. A pebble is thrown upward from the top of the falls with an initial velocity of 25 feet per second. The height of the pebble after  $t$  seconds is given by the equation  $h = 16t^2 + 25t + 104$ . How long after the pebble is thrown will it be 52 feet from the ground? Round to the nearest tenth of a second.

$52 = -16t^2 + 25t + 104$ or $0 = -16t^2 + 25t + 52$	1 pt to here
$t = \frac{-25 \pm \sqrt{25^2 - 4(-16)(52)}}{2(-16)}$	2 pt to here
$t = 2.74602$	3 pts to here
2.7 seconds	4 pts to here

33. A monitor at Bulls-eye's electronics is listed as being 20 inches. This distance is the diagonal distance across the screen. If the monitor has a square screen, what is the width of the screen? Keep answers in simplified radical form.

$x^2 + x^2 = 20^2$	1 pt to here
$x^2 = 200$	2 pts to here
$x = \sqrt{200}$ or $x = \pm\sqrt{200}$	3 pts to here
$x = 10\sqrt{2}$ in.	4 pts to here (3 pts no units)

34. A brace for a shelf has the shape of a right triangle. Its hypotenuse is 20 inches long and one of the legs is 14 inches long. How long is the other leg of the triangle? Keep answers in simplified radical form.

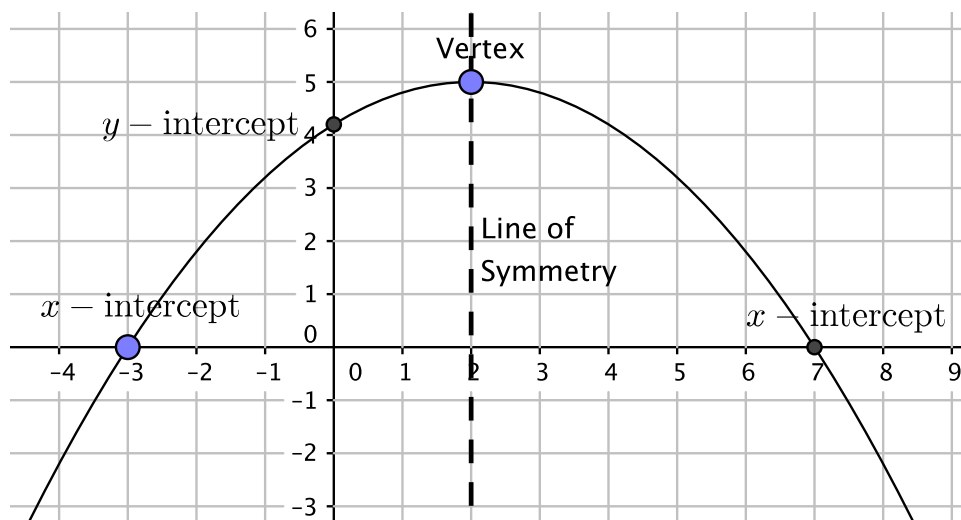
$x^2 + 14^2 = 20^2$	1 pt to here
$x^2 = 204$	2 pts to here
$x = \sqrt{204}$ or $x = \pm\sqrt{204}$	3 pts to here
$x = 2\sqrt{51}$ in.	4 pts to here (3 pts no units)

35. Given  $f(x) = x^2 - 4x + 3$ . Identify the vertex,  $y$ -intercept,  $x$ -intercept(s), axis of symmetry. In order to receive full credit, you must show your work.

vertex $(2, -1)$	Add 2 pts
$x$ -intercepts $(1, 0), (3, 0)$	Add 2 pts for each
$y$ -intercept $(0, 3)$	Add 1 pt
Axis of Symmetry $x = 2$	Add 1 pt

36. Graph the quadratic function with the characteristics below. Be sure to label the appropriate points on the graph.

- Vertex:  $(2, 5)$
- $y$ -intercept:  $y = 4.2$
- $x$ -intercepts:  $x = -3, 7$
- Axis of symmetry:  $x = 2$

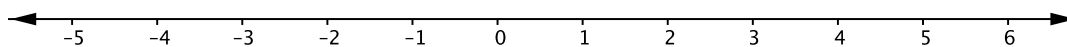


Plot the vertex correct	1 point
Plot the $x$ -intercepts	Add 2 pts
Plot the $y$ -intercept	Add 1 pt
Have a concave down parabola	Add 2 pts
Label the points	Add 2 pts

37. Solve  $|x + 2| - 1 = 6$ .

$ x + 2  = 7$	1 pt
$x + 2 = 7$	
$x = 5$	2 pt
$x + 2 = -7$	3 pt to here
$x = -9$	4 pt to here

38. Solve  $|7x + 1| \geq 3$  and graph the solution on the number line below.



$7x + 1 \geq 3$ or $7x + 1 \leq -3$	2 pts
$x \geq \frac{2}{7}$ or $x \leq -\frac{4}{7}$	1 pt
Graphing the solution correctly	1 pt

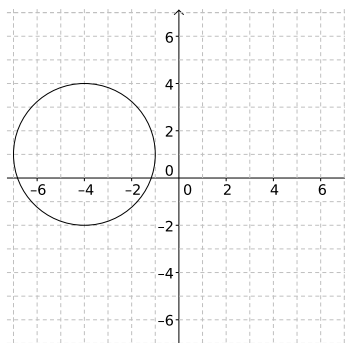
39. Find the distance between  $(3, -6)$  and  $(-1, -9)$ .

$d = \sqrt{(-1 - 3)^2 + (-9 - (-6))^2}$	
$d = \sqrt{(-4)^2 + (-3)^2}$	1 pts to here
$d = \sqrt{16 + 9}$	2 pts to here
$d = \sqrt{25}$	3 pts to here
$d = 5$	4 pts to here

40. Find the distance between  $(7, 3)$  and  $(1, 10)$ .

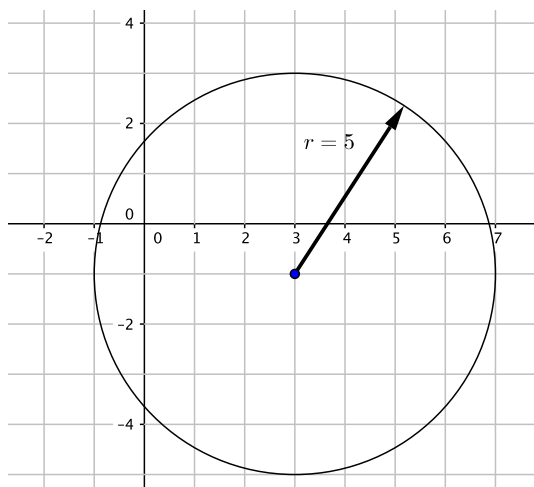
$d = \sqrt{(1 - 7)^2 + (10 - 3)^2}$	1 pt to here
$d = \sqrt{(-6)^2 + (7)^2}$	2 pts to here
$d = \sqrt{36 + 49}$	3 pts to here
$d = \sqrt{85}$	4 pts to here

41. Find the center and radius, and graph the circle  $(x + 4)^2 + (y - 1)^2 = 9$ .



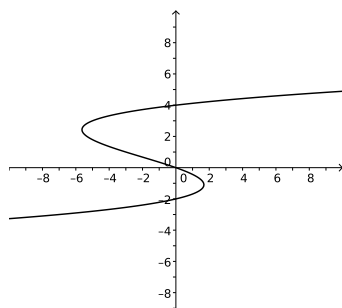
Correct graph	Add 2 points
Center $(-4, 1)$	Add 2 points
Radius 3	Add 2 points

42. Find the equation of the circle graphed below.

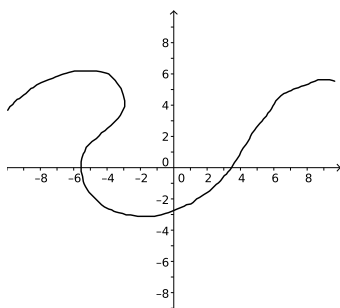


Correct form of the equations	$(x - h)^2 + (y - k)^2 = r^2$	Add 2 points
Correct center of the circle	$(3, -1)$	Add 2 points
Correct radius of the equation	$r = 5$	Add 2 points

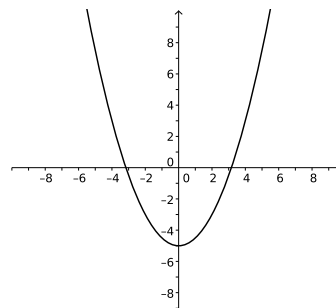
43. Determine whether each graph represents a function.



Yes or No



Yes or No



Yes or No

No (1 pt)   No (1 pt)   Yes (1 pt)  
 Add 1 point if all 3 correct

44. Each table below contains some data pertaining to a function. Identify the domain and range for each.

(a) Wide Receivers on SCSU's Football Team:

Jersey Number	80	84	85	88
Weight (in lbs.)	200	193	200	207

(b) Towns in Connecticut:

Area Code	203	860	203
ZIP Code	06437	06117	06515

- |     |   |             |
|-----|---|-------------|
| (a) | Domain: Jersey Number or $\{80, 84, 85, 88\}$ | Add 1 point |
|     | Range: Weight or $\{193, 200, 207\}$          | Add 1 point |
|     |   |             |
| (b) | Domain: ZIP Code or $\{06437, 06117, 06515\}$ | Add 1 point |
|     | Range: Area Code or $\{203, 860\}$            | Add 1 point |