Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

41 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.35

Assigned Media | Question Help

Solve by completing the square.

$2x^2 - 5x - 17 = 0$

The solution is x = .

(Type an exact answer, using radicals as needed. Express complex numbers in terms of *i*. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

42 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.37

Assigned Media | Question Help

Use the quadratic formula to find the exact solutions of the following equation.

$x^2 - 10x = 39$

The solution(s) is/are ☐.

(Simplify your answers. Type exact answers, using radicals as needed. Use a comma to separate answers as needed. Express complex numbers in terms of i. Type each solution only once.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

43 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.39

Assigned Media | Question Help

Solve.

$6x^2 + x = 15$

x = ☐

(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

44 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.41

Assigned Media | Question Help

Solve for x.

$6x^2 = -35x - 25$

x = ☐

(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

45 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.43

Assigned Media | Question Help

Solve for x.

$x^2 - x + 6 = 0$

The solution is x = ☐.
(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of *i*. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

46 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.49

Assigned Media | Question Help

Use the quadratic formula to find the exact solutions of the following equation.

$x^2 + 6x + 4 = 0$

The solution(s) is/are ☐.

(Simplify your answers. Type exact answers, using radicals as needed. Use a comma to separate answers as needed. Express complex numbers in terms of i. Type each solution only once.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

47 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.51

Assigned Media | Question Help

Use the quadratic formula to solve the equation.

$2x^2 - 13x = 1$

The solutions are x = ☐.

(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

48 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.55

Assigned Media | Question Help

Use the quadratic formula to find exact solutions.

$5x^2 + 6x = -2$

$x =$ ☐

(Simplify your answer. Type your answer in the form a + b*i*. Use a comma to separate answers as needed. Use integers or fractions for any numbers in the expression.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

49 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.91

Assigned Media | Question Help

Solve.

$x^4 - 16x^2 + 63 = 0$

The solution is x = .

(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

50 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.95

Assigned Media | Question Help

Solve the following equation.

$y^4 + 4y^2 - 5 = 0$

y = ☐

(Type exact answers, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed. Type each solution only once.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

51 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.97

Assigned Media | Question Help

Solve the following equation. (Hint: Let $u = \sqrt{x}$.)

$$x - 4\sqrt{x} - 21 = 0$$

The solution(s) is/are ☐.

(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

52 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.99

Assigned Media | Question Help

Solve.

$x^{2/3} - 2x^{1/3} - 3 = 0$

The solution is x = ☐.

(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

53 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.101

Assigned Media | Question Help

Solve.

$x^{2/3} - 3x^{1/3} - 10 = 0$

The solution is x = ☐.

(Simplify your answer. Type an exact answer, using radicals as needed. Express complex numbers in terms of i. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

54 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.105

Assigned Media | Question Help

Solve.

$$(90t^2+t)^2-92(90t^2+t)+91=0$$

The solutions are t = ☐.

(Type an integer or a simplified fraction. Use a comma to separate answers as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

55 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.111

Assigned Media | Question Help

The formula $S = 16t^2$ is used to approximate the distance S, in feet, that an object falls freely from rest in t seconds. The height of a building is 1085 feet. How long would it take for an object to fall from the top?

The object would fall for ☐ seconds.

(Simplify your answer. Type an integer or a decimal rounded to the nearest tenth.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

56 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.113

Assigned Media | Question Help

The diagonal of a TV set is 39 inches long. Its length is 21 inches more than the height. Find the dimensions of the TV set.

The height of the TV set is ☐ inches.

Enter your answer in the answer box and then click Check Answer.

1 part remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

57 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.115

Assigned Media | Question Help

One number is 9 greater than another. The product of the numbers is 90. Find the numbers.

One pair of numbers, both of which are positive, is ☐.

Enter your answer in the answer box and then click Check Answer.

1 part remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

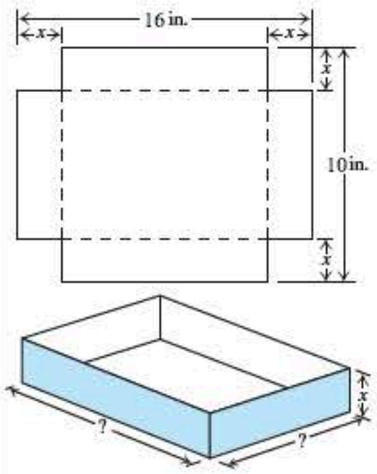
58 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.117

Assigned Media | Question Help

A lady wants to make an open-top box for packing baked goods by cutting equal squares from each corner of an 10 in. by 16 in. piece of cardboard as shown in the diagram. She figures that for versatility the area of the bottom must be 80 in.^{2}. What size of square should she cut from each corner?



The area cut from each corner should be ☐ in.^{2}.

(Simplify your answer. Type an integer or decimal rounded to three decimal places as needed.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

59 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.119

Assigned Media | Question Help

Find the dimensions of a rectangular Persian rug whose perimeter is 20 ft and whose area is 24 ft^2.

The Persian rug has a length (longer side) of ☐ ft and a width (shorter side) of ☐ ft.

Enter your answer in the edit fields and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

60 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.2.139

Assigned Media | Question Help

Solve the following equation.

$$(4x^3 + 8x^2 - 5x)(x^2 - 5) = 0$$

x = ☐

(Type an integer or a simplified fraction. Type an exact answer, using radicals as needed. Use a comma to separate answers as needed. Express complex numbers in terms of i.)

Enter your answer in the answer box and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

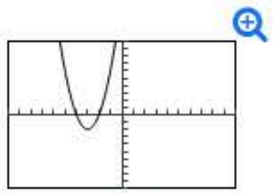
61 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.1

Assigned Media | Question Help

Use the graph of the quadratic function $f(x) = a(x - h)^2 + k$ to find the vertex, axis of symmetry, the range, and the minimum or maximum value of the function.



[−10,10, −10,10] Xscl = 1 Yscl = 1

The vertex is ☐.
(Type an ordered pair.)

Enter your answer in the answer box and then click Check Answer.

3 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

62 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.3

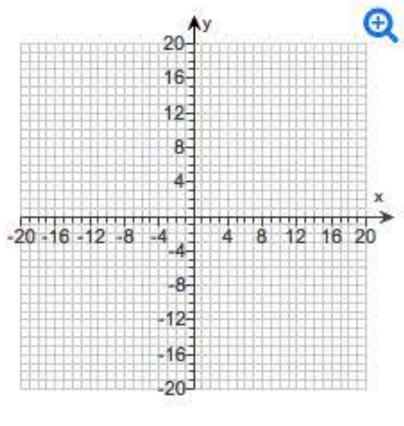
Assigned Media | Question Help

Graph the function.

$f(x) = x^2 - 8x + 15$

Use the graphing tool on the right to graph the function.

Click to enlarge graph



Click the graph, choose a tool in the palette and follow the instructions to create your graph.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

63 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.5

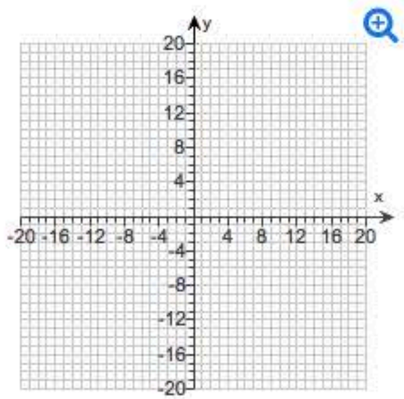
Assigned Media | Question Help

Graph the function.

$f(x) = x^2 - 6x + 8$

Use the graphing tool on the right to graph the function.

Click to enlarge graph



Click the graph, choose a tool in the palette and follow the instructions to create your graph.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

64 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.7

Assigned Media | Question Help

For the function below, find the vertex, the axis of symmetry, the maximum or minimum value, and the graph of the function.

$f(x) = x^2 + 4x + 9$

The vertex is at ☐.
(Type an ordered pair.)

Enter your answer in the answer box and then click Check Answer.

5 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

65 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.9

Assigned Media | Question Help

For the function below, find the vertex, axis of symmetry, maximum or minimum value, and the graph of the function.

$$f(x) = \frac{x^2}{2} + 4x + 4$$

The vertex is ☐.
(Type an ordered pair.)

Enter your answer in the answer box and then click Check Answer.

5 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

66 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.11

Assigned Media | Question Help

For the function below, find the vertex, the axis of symmetry, the maximum or minimum value, and the graph of the function.

$f(x) = 2x^2 - 7x + 2$

The vertex is $\square$.

(Type an ordered pair. Type fractions for the coordinates.)

Enter your answer in the answer box and then click Check Answer.

5 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

67 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.13

Assigned Media | Question Help

For the function below, find the vertex, the axis of symmetry, the maximum or minimum value, and the graph of the function.

$f(x) = -x^2 + 4x - 5$

The vertex is ☐.
(Type an ordered pair.)

Enter your answer in the answer box and then click Check Answer.

4 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

68 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.15

Assigned Media | Question Help

Find the vertex, the axis of symmetry, the maximum or minimum value of the quadratic function, and graph the function.

$f(x) = -2x^2 + 2x + 9$

Find the vertex, the axis of symmetry, the maximum or minimum value of the quadratic function, and graph the function.

$f(x) = -2x^2 + 2x + 9$

The x-coordinate of the vertex is $\square$.

(Type a simplified fraction.)

Enter your answer in the answer box and then click Check Answer.

5 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

69 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.17

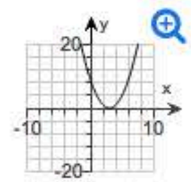
Assigned Media | Question Help

Graph the function.

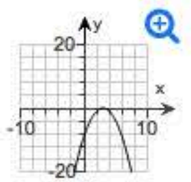
$f(x) = -(x-3)^2$

Choose the correct graph on the right.

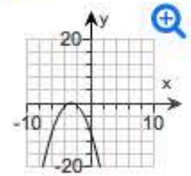
A.



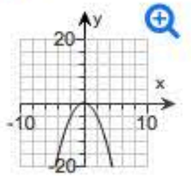
B.



C.



D.



Click to select your answer and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

70 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.19

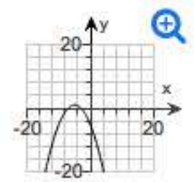
Assigned Media | Question Help

Graph the function.

$f(x) = 4(x+5)^2 + 1$

Choose the correct graph on the right.

A.



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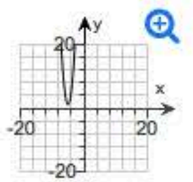

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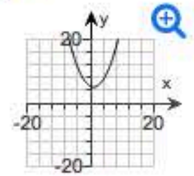
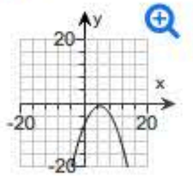


D.



Click to select your answer and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

71 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.21

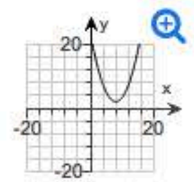
Assigned Media | Question Help

Find the correct graph of the function.

$f(x) = \frac{1}{3}(x+2)^2 + 8$

Choose the correct graph on the right.

A.



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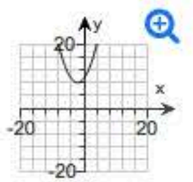

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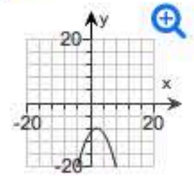

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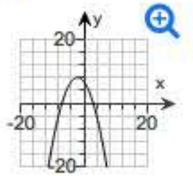


Click to select your answer and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

72 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.23

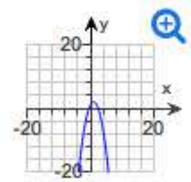
Assigned Media | Question Help

Graph the function.

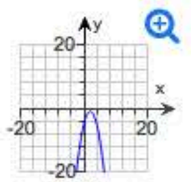
$f(x) = -(x+1)^2 - 2$

Choose the correct graph on the right.

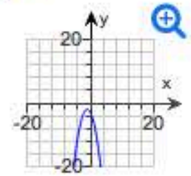
A.



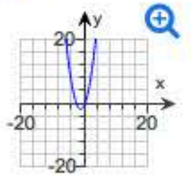
B.



C.



D.



Click to select your answer and then click Check Answer.

All parts showing

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

73 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.25

Assigned Media | Question Help

Determine whether the statement is true or false.

The function $f(x) = 6x^2 - 6x + 5$ has a maximum value.

The statement is ▼.

Click to select your answer(s) and then click Check Answer.

All parts showing

Clear All

Final Check

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

74 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.27

Assigned Media | Question Help

Determine whether the statement is true or false.

The graph of $h(x) = (x-2)^2$ can be obtained by translating the graph of $h(x) = x^2$ left 2 units.

The statement is [▼].

Click to select your answer(s) and then click Check Answer.

All parts showing

Clear All

Final Check

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

75 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.29

Assigned Media | Question Help

Determine whether the statement is true or false.

The axis of symmetry of the function $f(x) = -4(x+7)^2 + 3$ is $x = -7$.

The statement is ▼.

Click to select your answer(s) and then click Check Answer.

All parts showing

Clear All

Final Check

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

76 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.31

Assigned Media | Question Help

Find the vertex, the maximum or minimum value of the quadratic function, the range, and the intervals where the function increases and decreases.

$f(x) = x^2 - 10x - 3$

The x-coordinate of the vertex is? ☐

Enter your answer in the answer box and then click Check Answer.

5 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

77 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.33

Assigned Media | Question Help

Find the vertex, the maximum or minimum value of the quadratic function, the range, and the intervals where the function increases and decreases.

$f(x) = 2x^2 - 20x + 54$

The vertex is ☐.
(Type an ordered pair.)

Enter your answer in the answer box and then click Check Answer.

4 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

78 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.35

Assigned Media | Question Help

For the function $f(x) = -\frac{1}{2}x^2 + 7x - 3$, find the vertex, determine whether there is a maximum or minimum value and find that value, find the range, and find the intervals on which the function is increasing and decreasing.

What is the vertex?

(Type an ordered pair. Simplify your answer.)

Enter your answer in the answer box and then click Check Answer.

4 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

79 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.37

Assigned Media | Question Help

Find the vertex, the maximum or minimum value of the quadratic function, the range, and the intervals where the function increases and decreases.

$f(x) = 3x^2 - 12x + 22$

The x-coordinate of the vertex is ☐.

Enter your answer in the answer box and then click Check Answer.

5 parts remaining

Clear All

Check Answer

Homework: Homework III (3.1 - 3.3)

Save

Score: 0 of 3 pts

80 of 80 (0 complete)

HW Score: 0%, 0 of 257 pts

3.3.39

Assigned Media | Question Help

For the function $f(x) = -4x^2 - 4x + 3$, find the vertex, determine whether there is a maximum or minimum value and find that value, find the range, and find the intervals on which the function is increasing and decreasing.

What is the vertex?

(Type an ordered pair. Simplify your answer.)

Enter your answer in the answer box and then click Check Answer.

4 parts remaining

Clear All

Check Answer