

Solve

$$x^3 + 4x^2 - 25x - 100 = 0$$

$$x^2(x+4) - 25(x+4) = 0$$

$$(x+4)(x^2 - 25) = 0$$

1, 2, 3

$$(x+4)(x+5)(x-5) = 0$$

Firefox

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http://www.mathxl.com/Student/PlayerHomework.aspx?homeworkId=29927944&questionId=2: Google

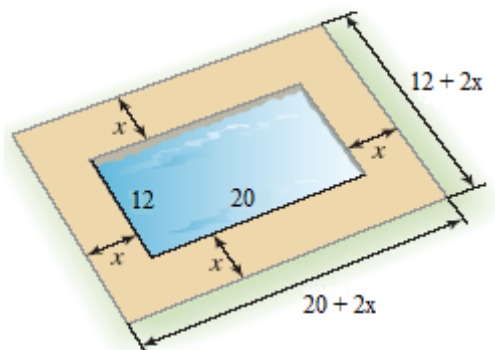
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Homework: HW 10.7 Overview

11 12 13 14 15 16 17 18 19 20 X10.7.75

Ex. Score: 0 of 1 pt HW Score: 0% (0 of 22 pts) 0 of 22 complete

A pool measuring 12 meters by 20 meters is surrounded by a path of uniform width, as shown in the figure. If the area of the pool and the path combined is 660 square meters, what is the width of the path?



The width of the path is meters.

$$(20 + 2x)(12 + 2x) = 660$$

$$240 + 40x + 24x + 4x^2 = 660$$

$$4x^2 + 64x - 420 = 0$$

$$4(x^2 + 16x - 105) = 0$$

$$4(x + 21)(x - 5) = 0$$

$$x = -21 \quad x = 5\text{m}$$

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Enter any number or expression in the edit field, then click Check Answer.

All parts showing

Clear All Check Answer Save

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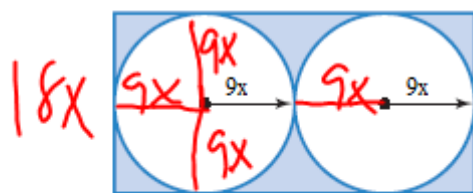
Review: HW 10.6 Overview

21 22 23 24 X10.6.85

Ex. Score: 0 of 1 pt HW Score: 0% (0 of 24 pts) 0 of 24 complete

a. Write an expression for the area of the shaded region.
 b. Write the expression in factored form.

The area of a rectangle is Base \times Height.
 The area of a circle is πr^2 .



a. The area of the shaded region is . (Do not factor.)

Handwritten notes:

Area Rectangle - 2 Circles
 $(18x)(36x) - 2(\pi(9x)^2)$

Handwritten calculations for the diagram:

18x (height)
 9x (radius of each circle)
 9x (width of each circle)
 $4(9x)$
 $36x$ (total width)

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This exercise has not been completed.

1 part remaining

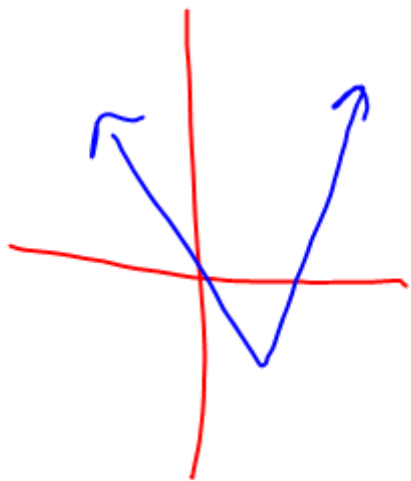
Similar Exercise Close

McAfee

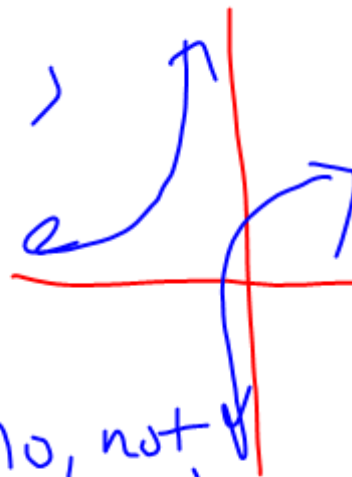
Review Ch 10

10.1 - adding & subtract - Graphing

10.2 - multiply



Is this a polynomial?
no, not smooth



no, not continuous

end behavior

$$f(x) = -x^5 + 3x^2 - 2x + 5$$



Simplify

7. $(6x^2 - 7x - 9) - (-5x^2 + 6x - 3)$

8. $(-7x^3y)(-5x^4y^2)$

9. $(x - y)(x^2 - 3xy - y^2)$

$$35x^7y^3$$

$$x^3 - 3x^2y - xy^2$$

$$-xy^2 + 3xy^2 + y^3$$

$$x^3 - 4x^2y + 2xy^2 + y^3$$

Factor

polynomial is prime.

16. $14x^3 - 15x^2$

17. $81y^2 - 25$

$$14x^3 - 15x^2$$

$$x^2(14x - 15)$$

$$81y^2 - 25$$

$$(\quad)^2 - (\quad)^2$$

$$(9y + 5)(9y - 5)$$

20. $12x^3 - 3$
 27. $3x^4 - 3$

Factor

$$3(x^4 - 1)$$

$$3(x^2 + 1)(x^2 - 1)$$

$$3(x^2 + 1)(x + 1)(x - 1)$$

$$8x^3 - 125y^3$$

$$\left(\frac{2x}{a}\right)^3 - \left(\frac{5y}{b}\right)^3$$

$$(2x - 5y)(4x^2 + 10xy + 25y^2)$$

Factor

22. $y^2 - 16y - 36$

23. $14x^2 + 41x + 15$

(22)

$$y^2 - 16y - 36$$

$$(y - 18)(y + 2)$$

6x
35x1.14
2.7

(23)

in clicker

$$14x^2 + 41x + 15$$

$$(2x + 5)(7x + 3)$$

17. $81y^2 - 25$

18. $x^3 + 3x^2 - 25x - 75$

19. $25x^2 - 30x + 9$

20. $x^2 + 10x + 25 - 9y^2$

21. $x^4 + 1$

Factor

$$\textcircled{18} \quad x^3 + 3x^2 - 25x - 75$$

$$x^2(x+3) - 25(x+3)$$

$$(x+3)(x^2 - 25)$$

$$(x+3)(x+5)(x-5)$$

$$\textcircled{20} \quad x^2 + 10x + 25 - 9y^2$$

$$(x+5)^2 - (3y)^2$$

$$(x+5+3y)(x+5-3y)$$

Solve

$$x^3 + 5x^2 = 9x + 45$$

$$x^3 + 5x^2 - 9x - 45 = 0$$

$$x^2(x+5) - 9(x+5) = 0$$

$$(x+5)(x^2-9) = 0$$

$$(x+5)(x+3)(x-3) = 0$$

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http://www.mathxl.com/Student/PlayerHomework.aspx?homeworkId=29927943&questionId=24

MyMathLab Sue Glasco Overview

Review: HW 10.6 X10.6.85

Ex. Score: 0 of 1 pt HW Score: 0% (0 of 24 pts) 0 of 24 complete

a. Write an expression for the area of the shaded region.
 b. Write the expression in factored form.

The area of a rectangle is Base \times Height.
 The area of a circle is πr^2 .

a. The area of the shaded region is . (Do not factor.)

rectangle - 2 circles
 $(18x)(36x) - 2(\pi(9x)^2)$
 $648x^2 - 162\pi x^2 \rightarrow 162x^2(4 - \pi)$

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Start End

T/F Y/N A-B A-C A-D A-E AS EA Verbal Cumulative % Correct Question % Correct

A-F A-G A-H A-I A-J 123... SA.. Chalkboard 78 78

Verbal Question Only - Verbal Question

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http://www.mathxl.com/Student/PlayerHomework.aspx?homeworkId=29928003&questionId=21

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Homework: HW 10.7


Overview

21 22 X10.7.83

Ex. Score: 0 of 1 pt HW Score: 0% (0 of 22 pts) 0 of 22 complete

A tree is supported by a wire anchored in the ground 18 feet from its base. The wire is 5 feet longer than the height that it reaches on the tree. Find the length of the wire.

The wire is feet long. (Simplify your answer.)


$$x^2 + 18^2 = (x+5)^2$$

Enter any number or expression in the edit field, then click Check Answer.

All parts showing

Clear All Check Answer Save

McAfee

$$X^2 + 18^2 = (X+5)^2$$

$$\cancel{X^2} + 324 = \cancel{X^2} + 10X + 25$$

$$299 = 10X$$

$$29.9 = X$$

wire is 34.9ft

what is
the length
of the
wire



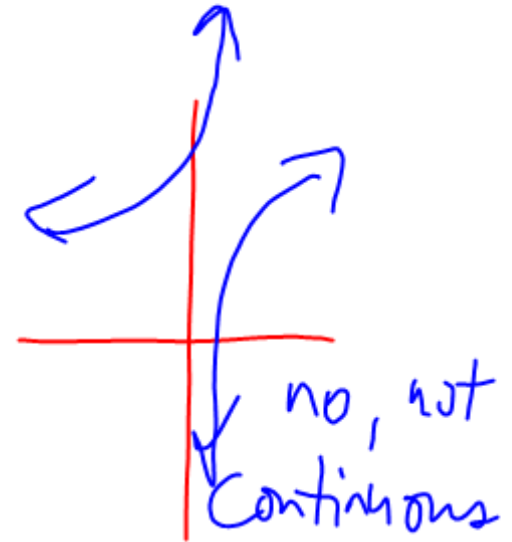
Review Ch 10

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10.2 - multiply

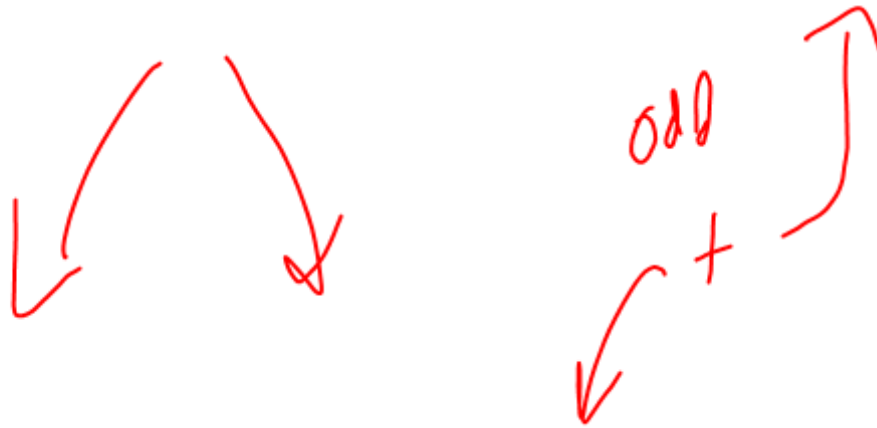


is this a polynomial
no it is not Smooth



no, not
Continuous

$$f(x) = -x^4 + 3x^2 - 2x + 1$$



Simplify

7. $(6x^2 - 7x - 9) - (-5x^2 + 6x -$

8. $(-7x^3y)(-5x^4y^2)$

9. $(\underline{x} - \underline{y})(\underline{x^2} - \underline{3xy} - \underline{y^2})$

8

$$35x^7y^3$$

9

$$\begin{array}{r}
 x^3 - 3x^2y - xy^2 \\
 - x^2y + 3xy^2 + y^3 \\
 \hline
 x^3 - 4x^2y + 2xy^2 + y^3
 \end{array}$$

Factor

polynomial is prime.

16. $14x^3 - 15x^2$

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Factor

$$14x^3 - 15x^2$$

$$x^2(14x - 15)$$

$$81y^2 - 25$$

$$(9y)^2 - (5)^2$$

$$(9y + 5)(9y - 5)$$

$$27. 3x^4 - 3$$

Factor

$$3(x^4 - 1)$$

$$(x^2)^2 - (1)^2$$

$$3(x^2 + 1)(x^2 - 1)$$

$$3(x^2 + 1)(x + 1)(x - 1)$$

$$125x^3 - 27y^6$$

$$(5x)^3 - (3y^2)^3$$

$$a - b$$

$$(5x - 3y^2)(25x^2 + 15xy^2 + 9y^4)$$

$$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$

31. $x^4 - 2x^2 - 24$

32. $12x^2y - 27xy + 6y$

Factor

$$x^4 - 2x^2 - 24$$

$$(x^2 - 6)(x^2 + 4)$$

$$12x^2y - 27xy + 6y$$

$$3y(4x^2 - 9x + 2)$$

$$3y(4x - 1)(x - 2)$$

17. $81y^2 - 25$

18. $x^3 + 3x^2 - 25x - 75$

19. $25x^2 - 30x + 9$

20. $x^2 + 10x + 25 - 9y^2$

21. $x^4 + 1$

(18) factor

$$x^3 + 3x^2 - 25x - 75$$

$$x^2(x+3) - 25(x+3)$$

$$(x+3)(x^2 - 25)$$

$$(x+3)(x+5)(x-5)$$

(20)

$$x^2 + 10x + 25 - 9y^2$$

$$(x+5)^2 - (3y)^2$$

$$(x+5+3y)(x+5-3y)$$