Class Name : **Lacoste College Algebra Fall 2019**

Student Name : _____

Instructor Name : **Master Templates**

Instructor Note : **All practice problems for Exam 1. There are multiple versions so that you can try challenging problems more than once.**

Question 1 of 38

Rewrite the expression by factoring out $(w+4)$.

$$2w^2(w+4)-5(w+4)$$

Question 2 of 38

Factor by grouping.

$$4w^3+7w^2-20w-35$$

Question 3 of 38

Factor by grouping.

$$2y-3x^2-xy+6x$$

Question 4 of 38

Factor.

$$x^2-9x+18$$

Question 5 of 38

Factor.

$$x^2+8xy-20y^2$$

Question 6 of 38

Factor completely.

$$2x^2 + 2x - 60$$

Question 7 of 38

Factor.

$$2z^2 - 11z + 5$$

Question 8 of 38

Factor.

$$21z^2 + z - 2$$

Question 9 of 38

Factor.

$$9z^2 + 18z - 16$$

Question 10 of 38

Factor.

$$4x^2 - 15xy + 14y^2$$

Question 11 of 38

Factor completely.

$$-2x^2 - 3x + 14$$

Factor.

$$w^2 + 14w + 49$$

Question 13 of 38

Factor.

$$25w^2 + 60w + 36$$

Question 14 of 38

Factor.

$$16w^2 - 24wu + 9u^2$$

Question 15 of 38

Factor.

$$49 - 36w^2$$

Question 16 of 38

Factor.

$$81u^2 - 64v^2$$

Question 17 of 38

Factor completely.

$$27y^2 - 75y^4$$

Factor completely.

$$3y^3 - 48x^2y$$

Factor completely.

$$8u^7 + 12u^6 - 20u^5$$

Factor completely:

$$32w^4 - 2v^4w^4.$$

Factor.

$$8w^3 - 27$$

Simplify.

$$\sqrt{24}$$

Simplify.

$$\sqrt{189}$$

Simplify.

$$8\sqrt{7} - 5\sqrt{7}$$

Simplify.

$$-\sqrt{27} + 2\sqrt{12}$$

Simplify.

$$\sqrt{75z} - \sqrt{27z}$$

Assume that the variable represents a positive real number.

Simplify.

$$\sqrt{5} \cdot \sqrt{3}$$

Simplify.

$$\sqrt{12} \cdot \sqrt{6}$$

Write in terms of i.
Simplify your answer as much as possible.

$$\sqrt{-80}$$

Solve.

$$(7+v)(4v-6)=0$$

(If there is more than one solution, separate them with commas.)

Solve for w.

$$4w^2 - 24w = 0$$

Solve for v.

$$v^2 + 3v - 18 = 0$$

Solve for x.

$$5x^2 + 5 = -26x$$

Solve for v .

$$2v^2 + 9v + 8 = (v+6)^2$$

If there is more than one solution, separate them with commas.

Solve $x^2 = 27$, where x is a real number.
Simplify your answer as much as possible.

Solve $(y-10)^2 - 54 = 0$, where y is a real number.
Simplify your answer as much as possible.

Use the quadratic formula to solve for x.

$$2x^2 - 5x - 4 = 0$$

Question 38 of 38

Find all complex solutions of $2x^2 + 3x + 5 = 0$.

Exam 1 Practice Problems #2 Answers for class Lacoste College Algebra Fall 2019

Question 1 of 38

$$(w+4)\left(2w^2-5\right)$$

Question 2 of 38

$$(4w+7)\left(w^2-5\right)$$

Question 3 of 38

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

Question 4 of 38

$$(x-3)(x-6)$$

Question 5 of 38

$$(x-2y)(x+10y)$$

Question 6 of 38

$$2(x-5)(x+6)$$

Question 7 of 38

$$(z-5)(2z-1)$$

Question 8 of 38

$$(3z+1)(7z-2)$$

Question 9 of 38

$$(3z-2)(3z+8)$$

Question 10 of 38

$$(4x-7y)(x-2y)$$

Question 11 of 38

$-(x-2)(2x+7)$

Question 12 of 38

$(w+7)^2$

Question 13 of 38

$(5w+6)^2$

Question 14 of 38

$(4w-3u)^2$

Question 15 of 38

$(7+6w)(7-6w)$

Question 16 of 38

$(9u+8v)(9u-8v)$

Question 17 of 38

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

Question 18 of 38

$3y(y+4x)(y-4x)$

Question 19 of 38

$4u^5(u-1)(2u+5)$

Question 20 of 38

$2w^4(2-v)(2+v)(4+v^2)$

Question 21 of 38

$(2w-3)(4w^2+6w+9)$

$2\sqrt{6}$

$3\sqrt{21}$

$3\sqrt{7}$

$\sqrt{3}.$

$2\sqrt{3z}$

$\sqrt{15}$

$6\sqrt{2}$

$4i\sqrt{5}$

$$v = -7, \frac{3}{2}$$

$$w = 0, 6$$

$$v = 3, -6$$

$$-\frac{1}{5}, -5$$

$$v = 7, -4$$

$$x = 3\sqrt{3}, -3\sqrt{3}$$

$$y = 10 + 3\sqrt{6}, 10 - 3\sqrt{6}$$

$$\frac{5 + \sqrt{57}}{4}, \frac{5 - \sqrt{57}}{4}.$$

$$x = -\frac{3}{4} + \frac{\sqrt{31}}{4}i, -\frac{3}{4} - \frac{\sqrt{31}}{4}i$$