

 math 95

EXAM II IN-CLASS REVIEW

DISCLAIMER: THIS REVIEW IS NOT A PRACTICE TEST. THE PURPOSE OF THIS REVIEW IS TO GIVE YOU A STARTING POINT FOR YOUR OWN, PERSONALIZED, REVIEW!

はじめましょう!
(LET'S GET STARTED!)

[1.] SOLVE THE FOLLOWING - USE ANY METHOD

a. $2x^2 - 24x = 0$

e. $5x^2 - 10x + 3 = 16$

b. $8x^2 - 10x = 45$

f. $8x^3 - 12x^2 - 24x = 0$

c. $(x-3)(x-2) = 2(x+1)$

g. $4x^3 - 10x^2 + 8x - 20 = 0$

d. $3(x-15)^2 = 60$

h. $15x^2 - x = 2$

[2.] FIND THE VERTEX & GRAPH

a. $k(x) = -(x+11)^2 - 6$

b. $p(x) = 3x^2 - 12x + 10$

[3.] FIND DOMAIN

a. $f(x) = \frac{x^2 - 49}{x^2 - 14x + 49}$

b. $g(x) = \frac{2x + 17}{x^2 + 64}$

[4.] SIMPLIFY EACH RATIONAL EXPRESSION

a. $\frac{x-2}{x^2-3x-18} \cdot \frac{x^2+4x+3}{x+4}$

b. $\frac{w^2-2w-8}{(12w+1)(w-3)} \div \frac{w^2-9w+20}{(w-3)(2w+7)}$

[4 CONTINUED...]

c. $\frac{7}{12x} + \frac{6}{8x^2}$

d. $\frac{3x}{x-2} - \frac{5}{x+3}$

e. $2 + \frac{k-3}{k+1}$

f. $\frac{x}{x^2+11x+30} - \frac{5}{x^2+9x+20}$

g. $\frac{2}{x-1} - \frac{1}{1-x}$

[5.] SOLVE

a. $\frac{4}{w+5} + \frac{3}{w-5} = \frac{1}{w^2-25}$

b. $\frac{x+7}{x^2-9} = \frac{-x+2}{x-3}$

c. $\frac{x-4}{x^2-7x+12} - \frac{x+2}{x-3} = 0$

d. $\frac{x}{x^2+x-2} = \frac{2}{x^2-4x+3} - \frac{1}{x-3}$

[6.] PERFORM EACH OPERATION & SIMPLIFY

a. $3i(2-6i)$

b. $(2+3i) - (7+9i)$

c. $(10-i)(5+17i)$

d. $(5+2i)(5-2i)$

e. $\frac{2}{1+3i}$

f. $\frac{2-i}{3-4i}$