This practice exam is for review purposes only; the actual exam may differ in format and content. Use it as a study aid, and refer to the syllabus for specific details. - Robert Pearce

Name:_____

1. Add: $(3x^2 + 4x + 2) + (5x^2 - 2)$

2. Subtract: $(3x^2 + 1) - (4 + 4x^2)$

3. Multiply: $(x + 2)(x^2 + 3x - 5)$

4. Divide: $\frac{x^3+3x^2-5x+4}{x-2}$

5. Solve for x: $3x^2 + 4x = 0$

6. Solve for x: $2x^3 - 11x^2 + 10x + 8 = 0$

7. Find the domain: $\frac{x^3+2x^2}{x^2+3x+2}$

8. Find the domain: $\frac{25-x^2}{x^2+4x-5}$

Cont.

9. Identify any vertical, horizontal, or oblique asymptotes: $\frac{4x+5}{x+1}$

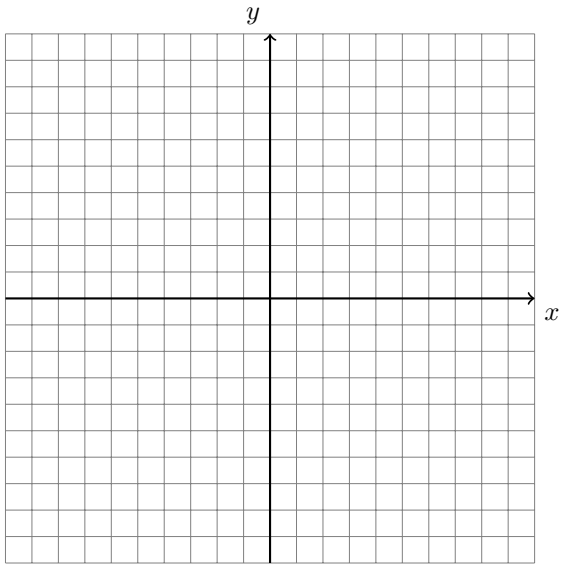
10. Identify any vertical, horizontal, or oblique asymptotes: $\frac{2x+5}{4x-3}$

11. Identify any vertical, horizontal, or oblique asymptotes: $\frac{x+2}{x^2-9}$

12. Identify any vertical, horizontal, or oblique asymptotes: $\frac{x^3+4x-5}{x^2+3x}$

Cont.

13. Graph: $(x-2)^2(x+4)$



14. Simplify: $(6+4i)+(3-2i)$

15. Simplify: $(4+3i)(5-6i)$

16. Simplify: $(5+3i)(5-3i)$

The End.