Math 80 Spring 2019 Factoring Practice Test Name:

Please silence your cell phone.

You must show your steps. If you're unsure whether you have enough work, please ask.

1. Factor $8x^3 + 27$ using the sum of two cubes.

2. Factor $9k^3 - 27k^2 - 4k + 12$ using grouping and then the difference of two squares.

3. Factor $12a^2 + 7a - 5$ using the method of your choice.

4. Factor $27x^3 - y^3$ using the difference of two cubes.

5. Factor $x^2 - 7x + 12$ using guess and check.

6. Factor x^4 – 16 using the difference of two squares <u>twice</u>.

7. Factor $3xy^3 + 3x$ using GCF and then the sum of two cubes.

8. Factor $14k^2 - 39k + 10$ using the method of your choice.

9. Factor $2x^2 + 3x - 5$ using guess and check.

^{10.} Factor $2h^4 + 2h^3 - 8h^2 - 8h$ using GCF, then grouping, then the difference of two squares.