FACTORING POLYNOMIALS – 1. BASIC FACTORING & TRINOMIALS (a=1)

Name:

Date:

Please remember to show/communicate all your work. You DO NOT need to answer every question, two correct answers at any level will demonstrate a student's level of attainment.

LEGEND						
✓	M	✘	S	N	G	H
correct	mostly correct	incorrect	silly mistake	did not know how to start or skipped	with group	got help

	Mild (🌶🌶)		Medium (🌶🌶🌶)		Spicey (🌶🌶🌶🌶)
Questions	#1	#2	#3	#4	#5
Results					

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1. Factor the following:

(a) $x^2 - 3x - 10$

(b) $m^2 + 4m - 32$

2. Factor the following:

(a) $3x^2 - 12x - 15$

(b) $2b^2 + 2bc - 12c^2$

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3. Factor the following:

(a) $m^4 - 16$

(b) $m^4 - m^2 - 12$

4. Solve a, b, and c (all natural numbers $\mathbb{N}$) for $x^2 + 12x + 32 = (\mathrm{x} + \mathrm{a})(\mathrm{x} + \mathrm{b}) + \mathrm{c}$, so that c is the …

(a) maximum possible value

(b) minimum (negative) possible value

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5. Fill in the missing spots to make the statement true. Explain some of the steps you took to solving, your initial thoughts/attempts, and include any rough work to help show your thinking.

$$\frac{x^2+3x-10}{x^2+2x-8} \div \frac{x^2+\square x+\square}{x^2+\square x+\square} = \frac{x+5}{x+3}$$