Name	Algebra I
Date	Period:

Module 4 Formative 1: Lessons 1 – 6 PRACTICE

Answer <u>all</u> questions.

Part I: Each question is worth 2 points.

1	Solve: $10r^2 = 15r$
1.	$\begin{bmatrix} 50170. & 10\lambda \\ 0 \end{bmatrix} = 10\lambda$
2	$S_{a} = 12 \kappa + 2 E = 0$
Ζ.	Solve: $x^2 - 12x + 35 = 0$
2	
3.	Factor the following completely: $-8x^2 - 40x + 48$
4.	The area of a sandbox is expressed as $x^2 - 16x + 39$.
	If the length of the rose garden is $(x - 3)$, find the width of the sandbox.

5.	Factor completely: $6x^3 + 30x^2 + 36x$
6.	The length of a rectangle is 4 cm more than 4 times its width. If the area of the rectangle is 3 times the width plus 18 in^2 , find the width.
7	Solve:
	$x^2 - 12x + 23 = -9$
8	
0.	Factor completely: $3x^2 - 21x^3 - 54x^2$

Part II – Each question is worth 2 points.

9	Solve: $(x - 4)^2 - 36$
	Solve. $(x - 4) = 30$
10	Easter completely, $2x^3 = 49x$
10	Factor completely. $5x - 46x$

11.	Solve:
	$p^2 + 14p - 22 = 5p$
12	Easter completely:
12.	$r^4 - 81r^8$

13

The length of a rectangle is 5 in. more than twice a number. The width is 4 in. less than the same number. The perimeter of the rectangle is 44 in. Sketch a diagram of this situation and find the unknown number.

b. What are the actual dimensions of the rectangle?

14.	The area of a rectangle is represented by the expressions $x^2 + 12x + 35$.
	a. Express the area of the rectangle as the product of two binomials.
	b. If the width and length of the rectangle are both increased by 4, compute the area of the new rectangle.
	c. Write an expression for the difference between the original rectangle and the