

FACTORING PACKET

	# Incorrect	# Checked	Correctness Grade
#1-52			
#53-60			

	# not completed	# of Checks not completed	Completeness Grade
#1-52			
#53-60			

General Directions:

- ◆ Numbers 1-52, factor completely: #1-32 (10-3), #33-40 (10-4), #41-46 (10-2 grouping).
- ◆ Numbers 47-52 have two or three factoring processes to be done (combination of sections 2-5). There are NO primes in this section!!!
- ◆ Numbers 53-60 are from 10-6, solve by factoring & check. (Hint, #58-59 have 2 factoring processes like #47-52!) There are NO primes in this section!!!

Directions:	Total possible points	Points earned
Do all work (thought process, lists of factors, etc) in the space provided. (You may have to write small.)	40	
If the polynomial does not factor, write “prime” in the answer space. Make sure you have all possible sets of factors listed to support your answer. There are only 3 primes and they are between #1-32. All others can be factored.	5	
Final answers for #1-52 should be completely factored. Solutions for #53-60 should be listed least to greatest in { }’s and can be integers, reduced fractions or mixed numbers (NO IMPROPER FRACTIONS or DECIMALS). Write final answers in the space provided. Only answers that are in this space will be graded.	10	
#1-46: Check by FOIL. (Rewrite the answer and show at least one work step.) #47-52: Check by FOIL and/or Distributive Property. (Make sure you rewrite the answer then do the check.) #53-60: Check <u>each</u> solution in the original problem using the order of operations to simplify each side. 1 per step per side and use ()’s. Do not work with mixed numbers- USE IMPROPER FRACTIONS. Please label work!	40	
Only work done in pencil will be accepted. This packet must be stapled in the correct order. Fill in the heading.	5	
	Directions Grade	

This assignment is due by the bell to start your class on Tuesday, April 15, 2008. Any packet **NOT** in the tray **BY** the bell will be considered late. If the packet is turned any time after the bell to start class on Tuesday, 4/15, there will be a 10-point deduction. For each **DAY** the packet is late, there will be a 20-point deduction. Any packet turned in on Monday, 4/14 will receive an extra 3 points. This packet counts as a test grade and should be an easy way to get an A!!

1) $x^2 - 16x + 60$	2) $x^2 + 10x - 96$	3) $x^2 - 21x - 72$	4) $x^2 - 14x - 15$
√:	√:	√:	√:
5) $x^2 - 8x + 105$	6) $x^2 + 4x - 21$	7) $x^2 - 15xy + 44y^2$	8) $x^2 + 4x - 192$
√:	√:	√:	√:

PND:

CND:

ANR:

9) $x^2 + 11x - 152$	10) $x^2 + 15x + 50$	11) $x^2 - 13x - 48$	12) $x^2 - 17x - 70$
√:	√:	√:	√:
13) $x^2 + 25x + 24$	14) $x^2 + 10x - 24$	15) $x^2 - 26x + 169$	16) $x^2 - 16x + 39$
√:	√:	√:	√:

PND:
CND:
ANR:

17) $x^2 - 30x + 225$	18) $x^2 + 16x - 80$	19) $24x^2 - 2x - 1$	20) $18x^2 + 9x - 5$
√:	√:	√:	√:
21) $7x^2 + 51xy + 14y^2$	22) $6x^2 - 31x + 28$	23) $56 - 26x - x^2$	24) $20x^2 + 23x + 6$
√:	√:	√:	√:

PND:

CND:

ANR:

25) $13x^2 - 50xy - 8y^2$

26) $5x^2 - 61x - 52$

27) $5 + 13x - 6x^2$

28) $17x^2 + 49x - 6$

√:

√:

√:

√:

29) $4x^2 - 4x + 3$

30) $15x^2 - 13x + 2$

31) $8x^2 + 26x + 21$

32) $6x^2 - 23x + 20$

√:

√:

√:

√:

PND:

CND:

ANR:

33) $x^2 - 121$ 1) 2) 3)	34) $16x^2 - 25$ 1) 2) 3)	35) $-100 + x^2$ 1) 2) 3)	36) $9x^2 - 49y^2$ 1) 2) 3)

$\sqrt{\quad}$:	$\sqrt{\quad}$:	$\sqrt{\quad}$:	$\sqrt{\quad}$:
37) $144x^8 - 121$ 1) 2) 3)	38) $81 - x^2$ 1) 2) 3)	39) $x^2 - 225$ 1) 2) 3)	40) $1 - 4x^2$ 1) 2) 3)

$\sqrt{\quad}$:	$\sqrt{\quad}$:	$\sqrt{\quad}$:	$\sqrt{\quad}$:

PND:
CND:
ANR:

$$41) 2x^2 + 6x + xy + 3y$$

$$42) 4xy - 28x + 5y - 35$$

$$43) 18y + 22x - 33xy - 12$$

√:

√:

√:

$$44) 2x^3 + 9x^2 + 10x + 45$$

$$45) 36x^2 - 28x - 21y + 27xy$$

$$46) 27x^3 - 3x^2 + 18x - 2$$

√:

√:

√:

PND:

CND:

ANR:

$$47) 2x^3 + 26x^2 + 72x$$

$$48) x^3 + 3x^2 - 4x - 12$$

$$49) 24x^2 + 28x - 20$$

√:

√:

√:

$$50) x^4 - 17x^2 + 16$$

$$51) 75x^2 - 27$$

$$52) 98x^2y - 56xy + 8y$$

√:

√:

√:

PND:

CND:

ANR:

$$53) x^2 + 3x - 10 = 0$$

$$54) x^2 - 103 = 41$$

$$55) 2x^2 + 11x - 1 = 2x - 5$$

$$56) 12x^2 + 7x = -8x$$

√:

√:

√:

√:

PND:

CND:

ANR:

$$57) 4x^2 - 19x + 8 = x^2 + 2$$

$$58) 2x^3 - 60x = 14x^2$$

$$59) x^3 + 2x^2 - 9x - 18 = 0$$

$$60) 26 - x^2 = 2x - 9$$

√:

√:

√:

√:

PND:

CND:

ANR: