

76.44% $\frac{39.75}{52}$ C

Exam answers are to be in simplest form. A calculator may be used. No notes, no books, no
network may be used while taking this exam. Use blank spaces on the exam to show your work.
Attach all scratch paper to the exam.

Factor the expression completely.

Graded and scanned. Marked up with Drawboard PDF
below.

1) $yz^3 + 125y$

$\frac{3}{3}$

$$y(z^3 + 125)$$

$$y(z + 5)(z^2 - 5z + 25)$$

Factor the trinomial.

2) $32 + 12x + x^2$

$\frac{2}{2}$

$$x^2 + 12x + 32$$

32

8, 4

$$x^2 + 4x + 8x + 32$$

$$x(x+4) + 8(x+4)$$

$$(x+4)(x+8)$$

Show work for questions from MyMathLab chapter tests. Be sure to put the question number by your work. Partial credit may be given even though your final answer is wrong. Test proctor has the password to access MyMathLab Chapter tests.

Question 1

$$10x^3 + 6x^2 + 14x$$

$$2x(5x^2 + 3x + 7) \quad 35$$

Question 2

$$30y^4 - 5y^3$$

$$5y^3(6y - 1)$$

Split screen used with key on one side and student work on the other.

Question 3

$$x^3 + 5x^2 + 5x + 25$$

$$x^2(x+5) + 5(x+5)$$

$$(x+5)(x^2+5)$$

$$(x+5) \cancel{(x+5)} (x+5)^2$$

$\frac{1.75}{2}$

Typed

Question 4

$$8y^4 - 4y^3$$

$$4y^3(2y - 1)$$

Question 5

$$x^2 + 13x + 40$$

$$x^2 + 5x + 8x + 40$$

$$x(x+5) + 8(x+5)$$

$$(x+5)(x+8) \quad 40 \quad 8, 5$$

Question 6

$$8y^2 - 22y + 14$$

$$2(4y^2 - 11y + 7)$$

$$4y^2 - 4y - 7y + 7$$

$$4y(y-1) - 7(y-1)$$

$$2(y-1)(4y-7) \quad 28 \quad -7, 4$$

Question 7

$$9x^2 - 16$$

$$(3x-4)(3x+4)$$

Question 8

$$x^2 + 26x + 31 \quad 31$$

Show work for questions from MyMathLab chapter tests. Be sure to put the question number by your work. Partial credit may be given even though your final answer is wrong. Test proctor has the password to access MyMathLab Chapter tests.

Question 9

$$9x^2 + 100$$

Question 10

$$x^3 - 6x^2 + 4x - 24$$

$$x^2(x-6) + 4(x-6)$$

$$(x-6)(x^2+4)$$

$$(x-6)(x^2+4)$$

does not factor further

Question 11

$$(9y+5)^2 (9y+5)(9y+5)$$

$$81y^2 + 4$$

Question 12

$$w^2 - 16 = 0 = (w^2 - 4)$$

$$(w-4)(w+4)$$

1/16 (x+2)(x-4)

Question 13

45

$$x^2 - 4x - 45 = 0$$

$$x^2 + 5x - 9x - 45$$

$$x(x+5) - 9(x+5)$$

$$(x+5)(x-9)$$

Question 14

$$x(x-6) - 55 = 0$$

$$x^2 - 6x - 55$$

$$x^2 + 5x - 11x - 55$$

$$x(x+5) - 11(x+5)$$

Question _____

$$5(5-6) = 55$$

$$25 - 30$$

Question _____

10 help

$$(x+2)(x+2)$$

$$x^2 + 2x + 2x + 4$$

$$x^2 + 4x + 4$$

$$x^2 - 4$$