

MATH 017 EXAM III NAME: \_\_\_\_\_

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[ Run: 04/17/2013 at 15:24 Seed: 6357. Order of Checkable Items: Random.]

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**Response Grid** (Check the appropriate boxes thus:  )

Question	a	b	c	d	e
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**III-1.** Identify  $[-72x^6] \oplus [+12x^2]$

- a.  $-3x^{-8}$                       b.  $+6x^{-4}$                       c.  $-3x^+8$                       d.  $-6x^+4$   
 e. None of the preceding

**III-2.** Identify  $-4x^3 + 3x + 7 + 4x^4 + 6x^2 - 4x - 3$

- a.  $+4x^4 + 6x^2 + 3x - 4$   
 b.  $+4x^4 - 4x^3 + 6x^2 - x + 4$   
 c.  $-4x^3 + 6x^2 + 7x + 4$   
 d.  $-4x^4 + 3x^3 + 6x^2 - x - 4$   
 e. None of the preceding

**III-3.** Identify  $[126 \times 3^{-7}] \div [21 \times 3^{+1}]$

- a.  $2646 \times 3^{+6}$                       b.  $2646 \times 3^{-6}$                       c.  $6 \times 3^{-8}$   
 d.  $6 \times 3^{+8}$   
 e. None of the preceding

**III-4.** Identify  $[-75x^+7] \otimes [-5x^{-2}]$

- a.  $-375x^{-9}$                       b.  $+375x^{-5}$                       c.  $-25x^{+9}$                       d.  $+25x^{+5}$   
 e. None of the preceding

**III-5.** Identify  $(-5 + h)^3$

- a.  $-125 + h^3$   
 b.  $-125 + 75h - 15h^2 + h^3$   
 c.  $-125 - 75h - 15h^2 - h^3$   
 d.  $+125 + 75h + 15h^2 + h^3$   
 e. None of the preceding

**III-6.** Identify  $[+32x^{-2}] \otimes [+4x^{+9}]$

- a.  $-128x^{-7}$                       b.  $+8x^{-11}$                       c.  $-8x^{+7}$                       d.  $+128x^{+11}$   
 e. None of the preceding

**III-7.** Identify  $[-6 + 7x^{-1}] \boxtimes [-5x^2 + 4x - 2x^{-1}]$

- a.  $+30x^2 - 59x + 40x^{-1} + 14x^{-2}$   
 b.  $+30x^2 - 59x + 28 + 12x^{-1} - 14x^{-2}$   
 c.  $-5x^2 + 4x - 2x^{-1}$   
 d.  $+30x^2 - 59x + 40x^{-1} - 14x^{-2}$   
 e. None of the preceding

- III-8.** Identify  $[-56x^{-6}] \oplus [-14x^{-3}]$   
**a.**  $+4x^{-9}$                       **b.**  $+784x^{-3}$                       **c.**  $+784x^{+3}$                       **d.**  $+4x^{-3}$   
**e.** None of the preceding
- III-9.** Identify  $[-42x^{-7}] \oplus [+14x^{+4}]$   
**a.**  $-588x^{-3}$                       **b.**  $+588x^{-11}$                       **c.**  $-3x^{+3}$                       **d.**  $+3x^{+11}$   
**e.** None of the preceding
- III-10.** Identify  $-256 \times (+4)^{-3}$   
**a.**  $-256$                       **b.**  $-24$                       **c.**  $+4$                       **d.**  $-4$   
**e.** None of the preceding
- III-11.** Identify  $2 \times 4^{+3}$   
**a.** 14                      **b.** 128                      **c.** 678                      **d.** 24  
**e.** None of the preceding
- III-12.** Identify  $[+4x^2 - 2] \boxplus [-4x^4 + 3x^2 + 2x + 3]$   
**a.**  $3x^2 + 2x + 1$   
**b.**  $x^3 + x^2 + 2x - 3$   
**c.**  $-4x^3 + 3x^2 + 2x + 1$   
**d.**  $-4x^4 + 7x^2 + 2x + 1$   
**e.** None of the preceding
- III-13.** Identify  $[+4x^{+8}] \otimes [-17x^{+3}]$   
**a.**  $-21x^{+5}$                       **b.**  $-3x^{-5}$                       **c.**  $+68x^{-3}$                       **d.**  $-68x^{+11}$   
**e.** None of the preceding
- III-14.** Identify  $[-5x^4 + 7x^3 + 4x^2 - 5x + 3] \boxplus [+7x^3 - 5x^2 + 2x - 1]$   
**a.**  $-5x^4 + 14x^3 - x^2 - 3x + 2$   
**b.**  $+2x^4 + 2x^3 + 6x^2 - 6x + 2$   
**c.**  $-5x^4 + 7x^3 - 9x^2 + 7x + 2$   
**d.**  $+2x^4 + 14x^3 - x^2 - 3x + 2$   
**e.** None of the preceding
- III-15.** Identify  $[-5x^4 + 2x^3 - 5x^2 + x + 6] \boxminus [-6x^4 - x^3 + 5x^2 + 2x + 3]$   
**a.**  $-11x^4 + x^3 + 3x + 9$   
**b.**  $-11x^4 + x^3 + 3x^2 - x + 9$   
**c.**  $+x^4 + 3x^3 - 5x^2 - x + 3$   
**d.**  $+x^4 + 3x^3 - 10x^2 - x + 3$   
**e.** None of the preceding

**III-16.** Approximate  $\frac{-4 + 17h^2 + 12h^3}{-2 + 3h + 4h^2}$  to  $h^1$

- a.  $\frac{-4 + 17h^2 + 12h^3}{-2 + 3h + 4h^2} = +2 - 3h + [\dots]$
- b.  $\frac{-4 + 17h^2 + 12h^3}{-2 + 3h + 4h^2} = -3 + 2h + [\dots]$
- c.  $\frac{-4 + 17h^2 + 12h^3}{-2 + 3h + 4h^2} = -2 - 3h + [\dots]$
- d.  $\frac{-4 + 17h^2 + 12h^3}{-2 + 3h + 4h^2} = -3 - 2h + [\dots]$
- e. None of the preceding

**III-17.** Identify  $5h^2 - 7h^3 + 3h^4 - 4h^5 - [-2h^3 - h^4 + 7h^5 + 5h^6]$

- a.  $-2h^3 + 4h^4 + 8h^6 - 4h^7$
- b.  $-2h^3 + 6h^4 - 4h^5 - 4h^6$
- c.  $+5h^2 - 5h^3 + 4h^4 - 11h^5 - 5h^6$
- d.  $2h^3 + 6h^4 - 14h^5 - 2h^6 - 4h^7$
- e. None of the preceding

**III-18.** Identify  $[-3x^3 + 4x^2 - 2] \boxminus [2x^5 + 4x^4 + 5x - 3]$

- a.  $-4x^4 - 2x^3 - 3x^2 - x + 1$
- b.  $+2x^5 + 4x^4 - 3x^3 + 4x^2 + 5x - 3$
- c.  $-2x^5 - 4x^4 - 3x^3 + 4x^2 - 5x + 1$
- d.  $x^5 - x^4 - 3x^3 - 5x - 5$
- e. None of the preceding

**III-19.** Identify  $[+43x^{-2}] \otimes [-11x^{-8}]$

- a.  $-4x^{-10}$
- b.  $+4x^{-6}$
- c.  $-473x^{-10}$
- d.  $+473x^{-6}$
- e. None of the preceding

**III-20.** Identify  $256 \times 2^{-5}$

- a. 507
- b. -10692
- c. 8
- d. -768
- e. None of the preceding

**III-21.** Approximate  $\frac{6x^3 - x^2 + 13x - 6}{3x - 2}$  to  $x^1$ .

- a.  $\frac{6x^3 - x^2 + 13x - 6}{3x - 2} = 2x^2 + x + [\dots]$
- b.  $\frac{6x^3 - x^2 + 13x - 6}{3x - 2} = 2x^2 + [\dots]$

- c.  $\frac{6x^3 - x^2 + 13x - 6}{3x - 2} = 3x^2 + 3x + [\dots]$   
 d.  $\frac{6x^3 - x^2 + 13x - 6}{3x - 2} = 2x^2 + x + 5 + [\dots]$   
 e. None of the preceding

**III-22.** Identify  $[8 \times 2^{+6}] \times [14 \times 2^{-2}]$

- a. 448                      b. 896                      c. 1792                      d. 3594  
 e. None of the preceding

**III-23.** Approximate  $\frac{-2x^3 + 17x + 10}{x - 3}$  to  $x^{-1}$

- a.  $\frac{-2x^3 + 17x + 10}{x - 3} = +2x^2 + 3x + 1 - 2x^{-1} + [\dots]$   
 b.  $\frac{6x^3 + 7x^2 - 6}{3x - 1} = -2x^2 - 6x - 1 + 7x^{-1} + [\dots]$   
 c.  $\frac{6x^3 + 7x^2 - 6}{3x - 1} = -2 + 2x^{-1} - x^{-2} + [\dots]$   
 d.  $\frac{6x^3 + 7x^2 - 6}{3x - 1} = +2x - 3 + 4x^{-1} + [\dots]$   
 e. None of the preceding

**III-24.** Identify  $[+84x^{+5}] \oplus [-7x^{-3}]$

- a.  $-12x^{-8}$                       b.  $+12x^{+2}$                       c.  $-588x^{+8}$                       d.  $+588x^{+2}$   
 e. None of the preceding

**III-25.** Identify  $(+5 - h)^2$

- a.  $-25 + h^2$                       b.  $+25 + h^2$                       c.  $+25 - 10h + h^2$                       d.  $+25 - 5h + h^2$   
 e. None of the preceding