Gateway Exam #1 Practice Problems
Expanding Expressions

1. If the expression $-3(t+2)+t(t+1)$ was expanded and simplified as much as possible, you could obtain:

   (a) t^2-2t-6
   (b) t^2+2t-6
   (c) $t-6$
   (d) t^2-3t+3
   (e) $-2t+1$

2. If the expression $x(x+2)+x$ was expanded and simplified as much as possible, you could obtain:

   (a) x^2+x+2
   (b) $3x+2$
   (c) x^2+3x
   (d) x^2+2x
   (e) $2x^2+x$

3. If the expression $a^2(4+a)$ was expanded and simplified as much as possible, you could obtain:

   (a) $4a+a^3$
   (b) $16+a^2$
   (c) $16a+8a^2+a^3$
   (d) $4a^2+a^3$
   (e) $4a^2+a$

4. If the expression $(u+3)(u+1)$ was expanded and simplified as much as possible, you could obtain:

   (a) u^2+3u+1
   (b) u^2+3
   (c) u^2+4
   (d) $2u+4$
   (e) u^2+4u+3

5. If the expression $3(r+1)+r^2$ was expanded and simplified as much as possible, you could obtain:

   (a) r^2+3r+3
   (b) $3r+1+r^2$
   (c) $3r+1$
   (d) $3r+3$
   (e) $3r^2+3r+3$

6. If the expression $(h+1)(h+2)$ was expanded and simplified as much as possible, you could obtain:

   (a) h^2+2
   (b) h^2+3h+2
   (c) h^2+2h+3
   (d) $h+3$
   (e) h^3+3h^2+2h

7. If the expression $(w+2)(w-2)$ was expanded and simplified as much as possible, you could obtain:

   (a) w^2+4
   (b) w^2-4
   (c) w^2+2w+4
   (d) w^2-2w-4
   (e) w^2-2w+4

8. If the expression $(p+3)(p-2)$ was expanded and simplified as much as possible, you could obtain:

   (a) p^2-1
   (b) p^2-6
   (c) p^2+p-6
   (d) p^2-p+6
   (e) p^2+3p-2

9. If the expression $(w+1)(w-3)$ was expanded and simplified as much as possible, you could obtain:

   (a) w^2+2w-3
   (b) w^2+w-3
   (c) w^2-3
   (d) w^2+3w-1
   (e)w^2-2w-3

10. If the expression $x^2(x+2)$ was expanded and simplified as much as possible, you could obtain:

    (a) x^3+2
    (b) $x+2x^2$
    (c) x^2+2
    (d) x^3+2x^2
    (e) x^3+2x

11. If the expression $r(r+1)^2$ was expanded and simplified as much as possible, you could obtain:

    (a) r^3+2r^2+r
    (b) r^2+2r+1

(c) $r^3 + r$

(d) $r^3 + r^2 + 1$

(e) $r^2 + 1$

12. If the expression $u(u - 2)$ was expanded and simplified as much as possible, you could obtain:

(a) $u^2 - 2$

(b) $u - 2u$

(c) $-u$

(d) $u^2 - 2u$

(e) $-u^2$

13. If the expression $(4 - 3x)x^2$ was expanded and simplified as much as possible, you could obtain:

(a) $4 - 3x^3$

(b) $4x^2 - 3x$

(c) $4x^2 - 3x^3$

(d) $-x^3$

(e) $-3x^3$

14. If the expression $(t^4 - 4t)t^2$ was expanded and simplified as much as possible, you could obtain:

(a) $t^4 - 4t^3$

(b) $t^6 - 4t^3$

(c) $t^6 - 4t$

(d) $t^4 - 4t^2$

(e) $4t^6$

15. If the expression $(p^2 + 2)p$ was expanded and simplified as much as possible, you could obtain:

(a) $p^3 + 2$

(b) $p^2 + 2p$

(c) $3p^3$

(d) $3p^2$

(e) $p^3 + 2p$

Answers:

1.	a	2.	c	3.	d	4.	e	5.	a
6.	b	7.	b	8.	c	9.	e	10.	d
11.	a	12.	d	13.	c	14.	b	15.	e