CHAPTER 7 REVIEW

1. Find the missing factor:
$(8m^5)(?) = 40m^7$

A $32m^2$	B $5m^2$
C $5m$	D $32m$

2. Find the integral factors of 36.

A $2^2 \cdot 3^2$	B 1, 2, 6, 18, 36
C 1, 2, 3, 4, 6, 9, 12, 18, 36	D $4 \cdot 9$

3. Find GCF $(6a^3, 24a, 15a^2)$

A $3a$	B 3
C $3a(2a^2 + 8 + 5a)$	D $3a^3$

4. $(b - 5)^2 =$ $(b-5)(b-5)$
$b^2 - 5b - 5b + 25$
$b^2 - 10b + 25$

A $b^2 - 25$	B $b^2 - 10b + 10$
C $b^2 + 25$	D $b^2 - 10b + 25$

5. Identify the type of factoring used to factor:
$36n^2 - 25$

A GCF	B DIFF
C LOIF	D PRIME

6. Factor completely: $36n^2 - 25$

A $4(9n^2 - 6)$	B $(6n - 5)(6n + 5)$
C $(6n - 5)(6n - 5)$	D $(9n - 5)(4n + 5)$

7. Identify the type of factoring used to factor:
$y^3 - 9y^2 + 25y$

A GCF	B DIFF
C LOIF	D PRIME

8. Factor completely: $y^3 - 9y^2 + y$

A $(y^2 - 9)(y - 1)$	B $y(y^2 - 9y)$
C $y(y^2 - 9y + 1)$	D $y^2(y - 9)$

9. Identify the type of factoring used to factor:
$b^2 - 7b + 12$

A GCF	B DIFF
C LOIF	D PRIME

10. Factor completely: $b^2 - 7b + 12$

A $(b - 5)(b - 2)$	B $(b - 6)(b - 2)$
C $(b - 3)(b - 4)$	D $(b + 3)(b + 4)$

11. Identify the type of factoring used to factor:
$4n^2 + 9$

A GCF	B DIFF
C LOIF	D PRIME

12. Multiply: $(n - 7)(n - 7)$

$n^2-7n-7n+49$

$n^2-14n+49$

A $n^2 - 49$	B $n^2 + 49$
C $n^2 - 14n - 49$	D $n^2 - 14n + 49$

13. Multiply: $(3a - 2)(a + 5)$

$3a^2+15a-2a-10$

$3a^2+13a-10$

A $3a^2 + 13a - 10$	B $3a^2 + 17a - 10$
C $3a^2 - 10$	D $3a^2 + 6a - 10$

14. Multiply: $(2m - 3)(2m + 3)$

A $4m^2 + 12m - 6$	B $4m^2 - 9$
C $4m^2 - 6$	D $4m^2 + 12m - 9$

15. Factor completely: $4c^2 - 100$

$4(c^2-25)$

$4(c+5)(c-5)$

A $(2c - 10)(2c + 10)$	B $4(c^2 - 25)$
C $4(c - 5)(c + 5)$	D $4(c - 5)(c - 5)$

16. Factor completely: $x^2 + 16x + 64$

A $(x - 8)(x + 8)$	B $4(x^2 + 4x + 16)$
C $4(x + 4)(x + 4)$	D $(x + 8)(x + 8)$

17. Factor completely: $2x^2 + 14x - 88$

$2(x^2+7x-44)$

$2(x+11)(x-4)$

A $(2x + 22)(x - 4)$	B $(2x - 8)(x + 11)$
C $2(x + 11)(x - 4)$	D $2(x^2 + 7x - 44)$

18. Factor completely: $50d^3 - 2d$

$2d(25d^2-1)$

$2d(5d+1)(5d-1)$

19. Factor completely: $y^2 + 36$

Prime

20. Factor completely: $3x^2 - 10x + 3$

$(3x-1)(x-3)$