

PRACTICE - Unit 8 Test

**Simplify each sum or difference.
(2 Points Each)**

1 $9x^5y - 30x^5y$

2 $9m^3 + 12m^3$

3 $(7y^2 - 9y + 13) + (y^2 + 7y - 4)$

4 $(-8x^2 - 2x + 11) - (10x^2 + 4x - 12)$

Simplify each product. (2 Points Each)

5 $(x + 3)(x + 9)$

6 $(5c - 3)(2c + 7)$

7 $9x(2x - 5)$

8 $-4h(5h^2 - 3h + 2)$

9 $(n + 11)(n - 11)$

10 $(3m - 2)^2$

Name: _____

ID: A

What is the factored form of the following expressions? (2 Points Each)

11 $25b^2 - 64$

12 $d^2 + 11d + 30$

13 $20g^3 + 15g^2 - 8g - 6$

14 $d^2 - 20d + 100$

15 $d^2 - 14d + 49$

16 $4g^2 + 5g - 6$

17 $8x^2 + 18x + 9$

18 $27x^2 + 90x + 75$

19 $40k^3 - 60k^2 + 50k - 75$

20 $30y^2 - 8y - 70$

PRACTICE - Unit 8 Test
Answer Section

- 1 $-21x^5y$
- 2 $21m^3$
- 3 $8y^2 - 2y + 9$
- 4 $-18x^2 - 6x + 23$
- 5 $x^2 + 12x + 27$
- 6 $10c^2 + 29c - 21$
- 7 $18x^2 - 45x$
- 8 $-20h^3 + 12h^2 - 8h$
- 9 $n^2 - 121$
- 10 $9m^2 - 12m + 4$
- 11 $(5b + 8)(5b - 8)$
- 12 $(d + 6)(d + 5)$
- 13 $(5g^2 - 2)(4g + 3)$
- 14 $(d - 10)^2$
- 15 $(d - 7)^2$
- 16 $(4g - 3)(g + 2)$
- 17 $(4x + 3)(2x + 3)$
- 18 $3(3x + 5)^2$
- 19 $5(4k^2 + 5)(2k - 3)$
- 20 $2(3y - 5)(5y + 7)$