Name:_____ Period:_____ Date_____

FoM10 - Chapter 3: Part 2 PRACTICE Test

NO CALCULATOR SECTION

/12 Written Response: SHOW ALL WORK! REMEMBER UNITS!

1. What is the GCF of $12x^3y^2 + 18x^2y^2 + 6x^4y$ *(1 mark)*

Answer: _____

2. Factor. Check by expanding. $x^2 - 6x + 5$ *(2 marks)*

Answer: _____

Check:

3. Factor. $2x^2 - 5x - 3$ *(2 marks)*

Answer: _____

4. Factor. $9x^2 + 12xy + 4y^2$ *(2 marks)*

Answer: _____

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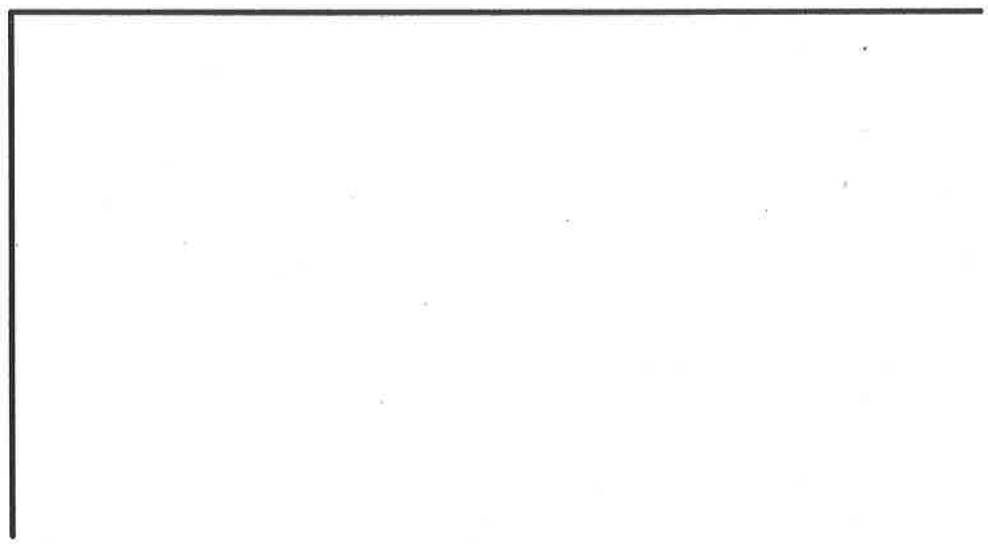
5. Factor FULLY: $2w^4 - 32$ *(3 marks)*

Answer: _____

6. Model the following binomial product by drawing algebra tiles. Write the final product. *(2 marks)*

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



final product:_____

Name: _____ Class: _____ Date: _____ ID: P

Chapter 3: Part 2 PRACTICE Test

Calculator Permitted

/10 Multiple Choice: Choose the BEST answer. Record your answer on the line.

____ 1. Simplify the expression $y^2 + 10y - 8 - 11y^2 - 30y - 32$, then factor.

a. $-5(2y^2 + 4y + 1)$
b. $-5(2y^2 + 4y + 8)$
c. $-10(y^2 - 2y - 4)$
d. $-10(y^2 + 2y + 4)$

____ 2. Identify the greatest common factor of the terms in the trinomial $12s^3t^4 + 24s^4t^2 - 30s^2t^3$.

a. $6s^3t^2$
b. $6s^2t^3$
c. $6s^2t^2$
d. $12s^2t^2$

____ 3. Factor: $t^2 + 4t - 21$

a. $(t + 7)(t - 3)$
b. $(t + 1)(t - 21)$
c. $(t - 7)(t + 3)$
d. $(t - 1)(t + 21)$

____ 4. Factor: $2b^2 + 18b - 20$

a. $2(b + 2)(b - 5)$
b. $2(b - 2)(b + 5)$
c. $2(b - 1)(b + 10)$
d. $2(b + 1)(b - 10)$

____ 5. Factor: $7n^2 + 62n - 9$

a. $(7n - 9)(n + 1)$
b. $(7n + 9)(n - 1)$
c. $(7n + 1)(n - 9)$
d. $(7n - 1)(n + 9)$

____ 6. Factor: $9a^2 + 48a + 64$

a. $(3a+8)^2$
b. $(9a+8)(a+8)$
c. $(3a \quad 8)^2$
d. $(3a+8)(3a-8)$

____ 7. Factor: $16p^2 - 81q^2$

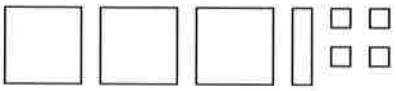
a. $(4p-9q)^2$
b. $(4p+9q)(4p-9q)$
c. $(4p+9q)^2$
d. $(16p-9q)(p-9q)$

____ 8. Identify this polynomial as a perfect square trinomial, a difference of squares, or neither.
$25g - 9h$

a. Perfect square trinomial
b. Difference of squares
c. Neither

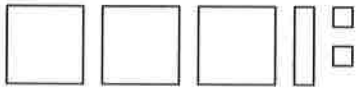
____ 9. Which set of algebra tiles represents $3x^2 + x + 4$?

a.

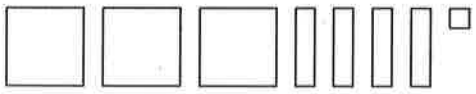


c.

b.



d.



____ 10. How MANY factors will this expression have when it is FULLY factored? $x^4 - x^2 - 12$

a. four
b. three
c. five
d. two