

Student Name: \_\_\_\_\_

Score: \_\_\_\_\_

**Factorize Using Formula**

$$a^2 - b^2 = (a + b)(a - b)$$

Problems

Work Space

|  |  |
|--|--|
| $3m^2 - 27$<br><br>Answer:               |  |
| $a^4 - 256$<br><br>Answer:               |  |
| $t^2 - 10000v^4$<br><br>Answer:          |  |
| $2x^5 - 32y^4x$<br><br>Answer:           |  |
| $125x^3y^5z^4 - 5xy^3z^6$<br><br>Answer: |  |
| $72a^3 - 98ab^2$<br><br>Answer:          |  |

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### Answers

|   |  |
|---|--|
| $3m^2 - 27$   |  |
| Answer: $3(m + 3)(m - 3)$                                 |  |
| $a^4 - 256$   |  |
| Answer: $(a^2 + 16)(a + 4)(a - 4)$                        |  |
| $t^2 - 10000v^4$  |  |
| Answer:<br>$(t + 100v^2)(\sqrt{t} + 10v)(\sqrt{t} - 10v)$ |  |
| $2x^5 - 32y^4x$   |  |
| Answer:<br>$2x(x^2 + 4y^2)(x + 2y)(x - 2y)$               |  |
| $125x^3y^5z^4 - 5xy^3z^6$                                 |  |
| Answer: $5xy^3z^4(5xy + z)(5xy - z)$                      |  |
| $72a^3 - 98ab^2$  |  |
| Answer: $2a(6a + 7b)(6a - 7b)$                            |  |