



Factor Polynomials (Order 3) - By Grouping to Order 2 Factors, Coefficient

1 (True/False)

1

Is this factoring step correct?

$$n^3 + 5n^2 + 9n + 45$$

$$= (n + 5)(n^2 + 9)$$

A

B

Yes

No

2

Is this factoring step correct?

$$w^3 - 9w^2 + 3w - 27$$

$$= (w + 9)(w^2 - 3)$$

A

B

No

Yes

3

Is this factoring step correct?

$$q^3 + 5q^2 + 2q + 10$$

$$= (q - 5)(q^2 - 2)$$

A

B

No

Yes

4

Is this factoring step correct?

$$r^3 - 7r^2 - 9r + 63$$

$$= (r - 7)(r^2 + 9)$$

A

B

No

Yes

5

Is this factoring step correct?

$$w^3 + 3w^2 + 8w + 24$$

$$= (w + 3)(w^2 - 8)$$

A

B

No

Yes

6

Is this factoring step correct?

$$m^3 - 8m^2 + 6m - 48$$

$$= (m + 8)(m^2 - 48)$$

A

B

No

Yes

7

Is this factoring step correct?

$$w^3 + 4w^2 + 5w + 20$$

$$= (w - 4)(w^2 - 5)$$

A

B

No

Yes

8

Is this factoring step correct?

$$m^3 + 5m^2 + 2m + 10$$

$$= (m + 5)(m^2 + 2)$$

A

B

Yes

No