



Factor Polynomials (Order 3) - By Grouping to Order 1 Factors, Coefficient 1 (True/False)

1

Is this factoring step
correct?

$$q^3 + 4q^2 - 9q - 36$$

$$= (q + 4)(q - 3)(q + 3)$$

A

B

Yes

No

2

Is this factoring step
correct?

$$x^3 - 8x^2 - 16x + 128$$

$$= (x - 8)(x - 4)(x - 4)$$

A

B

No

Yes

3

Is this factoring step
correct?

$$r^3 - 3r^2 - 25r + 75$$

$$= (r - 3)(r + 5)(r + 5)$$

A

B

No

Yes

4

Is this factoring step
correct?

$$t^3 - 7t^2 - 16t + 112$$

$$= (t - 7)(t + 4)(t + 4)$$

A

B

No

Yes

5

Is this factoring step
correct?

$$q^3 - 9q^2 - 9q + 81$$

$$= (q + 9)(q - 3)(q - 3)$$

A

B

No

Yes

6

Is this factoring step
correct?

$$x^3 + 3x^2 - 16x - 48$$

$$= (x - 3)(x + 4)(x + 4)$$

A

B

No

Yes

7

Is this factoring step
correct?

$$z^3 - 9z^2 - 9z + 81$$

$$= (z - 9)(z - 3)(z + 3)$$

A

B

Yes

No

8

Is this factoring step
correct?

$$w^3 + 9w^2 - 9w - 81$$

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

A

B

No

Yes