

1. Factor the following quadratic polynomial. $\beta^2 + 2\beta + 12$

A. $(\beta + 3)(\beta + 4)$

B. $(\beta - 3)(\beta - 5)$

C. Not factorable. This trinomial is prime.

D. $(\beta - 3)(\beta + 5)$

E. $(\beta + 2)(\beta - 6)$

F. $(\beta - 3)(\beta + 4)$

G. $(\beta - 3)(\beta - 4)$

H. $(\beta + 3)(\beta + 5)$

2. Factor the following quadratic polynomial. $\gamma^2 + 12\gamma + 32$

A. Not factorable. This trinomial is prime.

B. $(\gamma + 3)(\gamma - 10)$

C. $(\gamma + 3)(\gamma + 10)$

D. $(\gamma + 5)(\gamma + 9)$

E. $(\gamma + 4)(\gamma + 8)$

F. $(\gamma - 4)(\gamma + 8)$

G. $(\gamma + 6)(\gamma + 6)$

H. $(\gamma - 5)(\gamma + 9)$

3. Factor the following quadratic polynomial. $t^2 + 19t + 90$

A. $(t + 7)(t + 5)$

B. $(t + 10)(t + 9)$

C. $(t - 10)(t + 9)$

D. Not factorable. This trinomial is prime.

E. $(t - 4)(t + 4)$

F. $(t + 4)(t + 4)$

G. $(t + 3)(t + 2)$

H. $(t + 7)(t - 5)$

4. Factor the following quadratic polynomial. $x^2 - 2x\phi - 35\phi^2$

A. $(x - 5\phi)(x + 7\phi)$

B. $(x + 5\phi)(x + 7\phi)$

C. $(\phi + 5x)(\phi - 7x)$

D. $(x + 5\phi)(x - 7\phi)$

E. $(\phi + 5x)(\phi + 7x)$

F. $(\phi - 5x)(\phi - 7x)$

G. Not factorable. This trinomial is prime.

H. $(\phi - 5x)(\phi + 7x)$

5. Factor the following quadratic polynomial. $\theta^2 - 10\theta + 28$

A. $(\theta + 4)(\theta - 7)$

B. $(\theta - 4)(\theta - 7)$

C. $(\theta - 8)(\theta - 2)$

D. $(\theta + 4)(\theta + 7)$

E. $(\theta - 8)(\theta + 2)$

F. Not factorable. This trinomial is prime.

G. $(\theta + 8)(\theta + 2)$

H. $(\theta - 4)(\theta + 7)$

6. Factor the following quadratic polynomial. $\alpha^2 - 15\alpha - 28$

A. $(\alpha - 1)(\alpha - 9)$

B. $(\alpha - 2)(\alpha - 14)$

C. $(\alpha - 2)(\alpha + 14)$

D. Not factorable. This trinomial is prime.

E. $(\alpha - 1)(\alpha + 9)$

F. $(\alpha + 1)(\alpha + 9)$

G. $(\alpha + 2)(\alpha - 6)$

H. $(\alpha + 2)(\alpha + 14)$

7. Factor the following quadratic polynomial. $\xi^2 - 18\xi - 36$

A. $(\xi - 6)(\xi + 6)$

B. Not factorable. This trinomial is prime.

C. $(\xi + 7)(\xi - 6)$

D. $(\xi - 7)(\xi + 6)$

E. $(\xi + 6)(\xi + 6)$

F. $(\xi - 6)(\xi - 6)$

G. $(\xi - 7)(\xi - 6)$

H. $(\xi + 7)(\xi + 6)$

8. Factor the following quadratic polynomial. $\gamma^2 - 15\gamma + 54$

A. $(\gamma + 10)(\gamma + 4)$

B. $(\gamma - 6)(\gamma + 9)$

C. $(\gamma - 7)(\gamma + 8)$

D. $(\gamma + 10)(\gamma - 4)$

E. $(\gamma + 6)(\gamma + 9)$

F. Not factorable. This trinomial is prime.

G. $(\gamma + 7)(\gamma + 8)$

H. $(\gamma - 6)(\gamma - 9)$