

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Factor.

1) $u^2 - 5u + 6$

A) $(u - 2)(u + 3)$

B) $(u + 2)(u + 3)$

C) $(u + 2)(u - 3)$

D) $(u - 2)(u - 3)$

2) $x^2 - 2x - 80$

A) $(x - 8)(x + 1)$

B) $(x + 8)(x - 10)$

C) $(x - 8)(x + 10)$

D) Prime

3) $r^2 + 2r - 8$

A) Prime

B) $(r - 8)(r + 2)$

C) $(r + 4)(r - 2)$

D) $(r - 4)(r + 2)$

4) $x^2 - x - 35$

A) Prime

B) $(x - 35)(x + 1)$

C) $(x - 5)(x + 7)$

D) $(x + 5)(x - 7)$

5) $u^2 - 2uv - 63v^2$

A) $(u + 7v)(u - 9v)$

B) $(u - 7v)(u + v)$

C) $(u - 7v)(u + 9v)$

D) $(u - v)(u + 9v)$

6) $x^2 + 2xy - 35y^2$

A) $(x - 7y)(x + 5y)$

B) $(x - 7y)(x + y)$

C) $(x - y)(x + 5y)$

D) $(x + 7y)(x - 5y)$

7) $u^2 - 2uv - 48v^2$

A) $(u - 6v)(u + 8v)$

B) $(u - 6v)(u + v)$

C) $(u - v)(u + 8v)$

D) $(u + 6v)(u - 8v)$

Factor completely.

8) $8x^2 - 8x - 48$

A) $8(x - 2)(x + 3)$

B) $8(x + 2)(x - 3)$

C) Prime

D) $(8x + 16)(x - 3)$

9) $4x^3 + 8x^2y - 60xy^2$

A) $(4x^2 + 12xy)(x - 5y)$

B) $4x(x + 3y)(x - 5y)$

C) $(x - 3y)(4x^2 + 20xy)$

D) $4x(x - 3y)(x + 5y)$

10) $x^3y + 4x^2y^2 - 21xy^3$

A) $x(xy + 7y^2)(x - 3y)$

B) $y(x + 7y)(xy - 3y^2)$

C) $xy(x + 7y)(x - 3y)$

D) $xy(x^2 + 4x - 21y^2)$