

What are the solutions of the quadratic equation

$$4x^2 - 8x - 12 = 0 ?$$

A) $x = -1$ and $x = -3$

B) $x = -1$ and $x = 3$

C) $x = 1$ and $x = -3$

D) $x = 1$ and $x = 3$

| | | | |
|------|-------|--|------|
| | x | | 1 |
| x | x^2 | | $1x$ |
| -3 | $-3x$ | | -3 |

GCF

$$4(1x^2 - 2x - 3)$$

| | |
|------|------|
| -3 | 1 |
| -3 | -2 |

$$4(x-3)(x+1)$$

Factored form

$$x-3=0$$

$$x+1=0$$

$$x=3$$

$$x=-1$$