Answer 5

5. For all x >2, (2x² + 2x - 12) / (x - 2) simplifies to
   A) 2(x - 2)
   B) x + 3
   C) 2(x + 3)(x - 2)
   D) x - 2
   E) 2(x + 3)

First, note that the numerator can be simplified by factoring out a '2'

$$\frac{2(x^2 + x - 6)}{(x - 2)}$$

Then, factor the quadratic into (x + 3)(x – 2)

$$\frac{2(x + 3)(x - 2)}{(x - 2)}$$

At this point, the (x-2) cancels from the numerator and denominator leaving 2(x+3).