

Solving binomial equations and factoring out monomials

Solve

$$\textcircled{\text{ex}} (x-3)(2x+8) = 0$$

$$\frac{(x-3)}{+3} = 0 \quad \text{or} \quad \frac{(2x+8)}{+8} = 0$$

$$x = 3$$

$$\frac{2x}{2} = \frac{-8}{2}$$

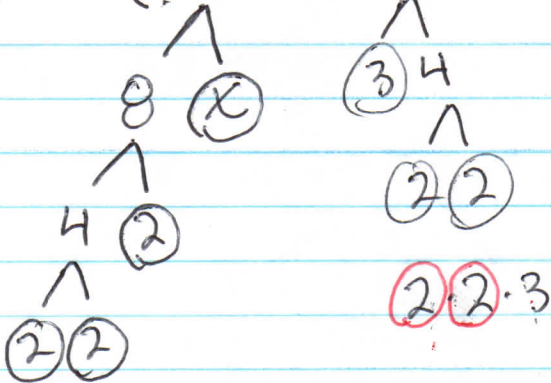
$$x = 3$$

and

$$x = -4$$

Factoring out a monomial

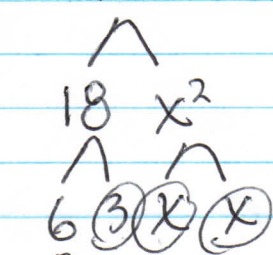
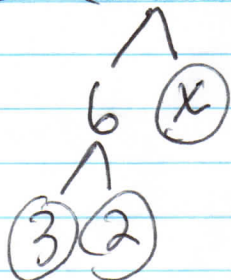
$$\textcircled{\text{ex}} (8x + 12) \quad 4(2x + 3)$$



$$2 \cdot 2 \cdot 2 \cdot x$$

ex $(6x + 18x^2)$

$6x(1 + 3x)$



~~3~~ · ~~2~~ · ~~x~~
3 · 2 · x

~~3~~ · ~~2~~ · ~~3~~ · ~~3~~ · ~~2~~ · ~~x~~ · ~~x~~
3 · 2 · x · x