PC 2-0 (Quadratics Review/General Review)

Let $f(x) = 3x^2 - 10x - 8$

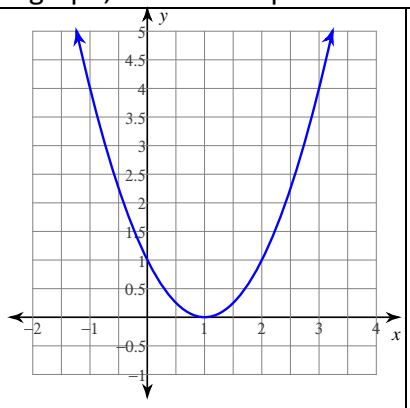
1) Factor $f(x)$. Show all steps.

2) Evaluate $f(0)$

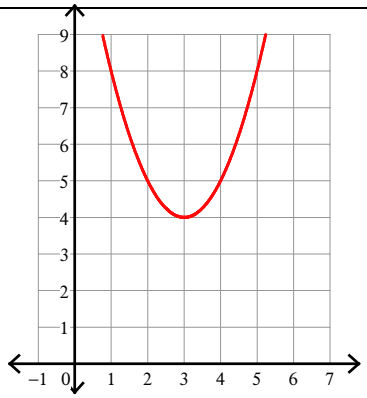
3) Solve $f(x) = 0$

Given the graph, write the equation.

4)




5)



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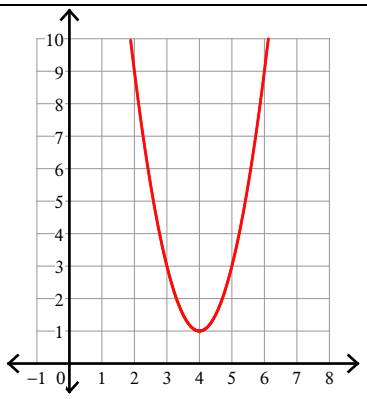


Multiply the given polynomials.

7) $(x + 4)(x^2 - 7x + 10)$

8) $(x^2 + 4x)(x^2 - 10x + 15)$

9) $(x^2 + 3x - 5)(x - 9)$

Factor.

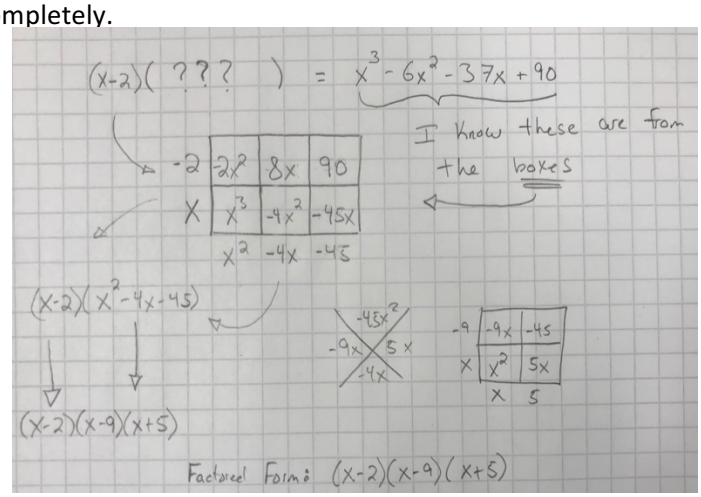
10) $x^2 - 2x - 63$

11) $3x^2 - 11x + 6$

12) $x^2 + 8x - 33$

## Example:

Given (x-2) is a factor of $x^3 - 6x^2 - 37x + 90$, factor completely.




1) Given (x+9) is a factor of $x^3 + 7x^2 - 21x - 27$, factor completely.

2) Given one factor of $x^3 + 12x^2 + 44x + 48$ is (x+2), factor completely.

3) Given one factor of $x^3 + 8x^2 - 13x - 140$ is (x-4), factor completely.

4) Given one factor of $x^3 - 8x^2 - 23x + 210$ is (x+5), factor completely.

5) Given one factor of $x^3 - 14x^2 + 28x + 120$ is (x-6), factor completely.

6) Given one factor of $x^3 - 6x^2 - x + 30$ is (x-3), factor completely.

7) Given one factor of $x^3 - 13x^2 + 14x + 88$ is (x-11), factor completely.