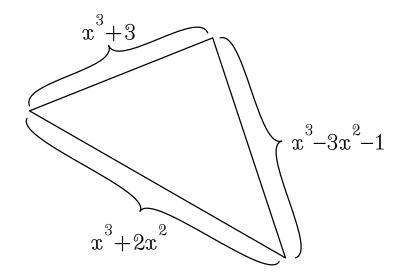
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Find a polynomial that represents the perimeter of the triangle.

1) The perimeter is found by adding the sides.

$$P = (x^{3} + 3) + (x^{3} - 3x^{2} - 1) + (x^{3} + 2x^{2})$$
set up the sum
$$= x^{3} + 3 + x^{3} - 3x^{2} - 1 + x^{3} + 2x^{2}$$
drop the parenthesis
$$= x^{3} + x^{3} + x^{3} - 3x^{2} + 2x^{2} + 3 - 1$$
regroup
$$= 3x^{3} - 1x^{2} + 2$$
add

Review of adding polynomials:

Add
$$(x^2+4)+(x^2-x)$$

- 1) Rewrite to show the coefficients clearly: $(1x^2+4)+(1x^2-1x)$
- 2) Drop the parenthesis: $1x^2 + 4 + 1x^2 1x$
- 3) Regroup like terms together: $1x^2 + 1x^2 1x + 4$
- 4) Now add the coefficients and copy the variable parts: $2x^2-1x+4$