Therefore $D = E$ and so $\blacksquare \setminus (B \setminus \quad) = (\blacksquare \setminus B) \cup (\blacksquare \cap \quad)$.

2

(i)

$xP\blacksquare$ for all $x, \blacksquare \in \mathbb{R}$ when $\blacksquare =$

T

Reflexive?

$x \quad x$ is true if and only if $x^3 = x^3 - x + x$.

$$x^3 = x^3$$

Therefore, is reT

Con lusion

is a not a partial order since it is not anti-symmetric. It is not an equivalence relation however, since it is reflexive, symmetric and transitive.

(i)

$f : [-1, 1] \to [-2, 2]$ for $f(x) = x^3 + x$, $x \in [-1, 1]$.

$$f'(x) = 3x^2 + 1 = 0$$

Therefore $f($