Answer on Question #51692 - Math - Algebra

Why we use \equiv sign in decomposing a partial fraction ? like $x/[(x-2)(x+1)] \equiv [A/(x-2)]+[B/(x+1)]$ and how we can say it's equivalent ?

Solution

We use
$$\equiv$$
 sign in expression $\frac{x}{(x-2)(x+1)} \equiv \frac{2}{3(x-2)} + \frac{1}{3(x+1)}$ because equality

$$\frac{x}{(x-2)(x+1)} = \frac{2}{3(x-2)} + \frac{1}{3(x+1)}$$
 takes place for any value of x .