## On the weak compactness of the product of some operators

BELMESNAOUI AQZZOUZ, OTHMAN ABOUTAFAIL and AZIZ ELBOUR

## ABSTRACT.

We study the weak compactness of the product of two operators when one of them is order weakly compact (resp. semi-compact, b-weakly compact).

DÉPARTEMENT D'ECONOMIE
UNIVERSITÉ MOHAMMED V-SOUISSI
FACULTÉ DES SCIENCES ECONOMIQUES, JURIDIQUES ET SOCIALES
B.P. 5295, SALAALJADIDA, MOROCCO
E-mail address: baqzzouz@hotmail.com

DÉPARTEMENT DE MATHÉMATIQUES UNIVERSITÉ IBN TOFAIL FACULTÉ DES SCIENCES B.P. 133, KÉNITRA, MOROCCO

Received: 09.12.2010; In revised form: 27.09.2011; Accepted: 30.09.2011.

<sup>2000</sup> Mathematics Subject Classification. 46A40, 46B40, 46B42.

Key words and phrases. Order weakly compact operator, weakly compact operator, semi-compact operator, b-weakly compact operator, order continuous norm.