

**Exercise 84**

**Signs of Numbers** Let  $a$ ,  $b$ , and  $c$  be real numbers such that  $a > 0$ ,  $b < 0$ , and  $c < 0$ . Find the sign of each expression.

(a)  $-b$

(b)  $a + bc$

(c)  $c - a$

(d)  $ab^2$ 

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**Solution**

Since  $b$  is negative,  $-b$  is positive.

Since  $a$  is positive and  $b$  and  $c$  are negative,  $a + bc$  is positive.

Since  $c$  is negative and  $a$  is positive,  $c - a$  is negative.

Since  $a$  is positive and  $b^2$  is positive,  $ab^2$  is positive.