Let $a$ and $b$ be integer variables. Refine $a' = a + b \land b' = a - b$ by replacing the question marks in the following. Prove that your answer is a refinement.

(a) 
$$a := ? . \ b := ?$$
$$\Downarrow$$
$$a := a + b . \ b := a - 2xb$$
$$\Downarrow$$
$$a := a + b . \ a' = a \land b' = a - 2xb$$
$$\Downarrow$$
$$a' = a + b \land b' = a - b$$

(b) 
$$b := ? . \ a := ?$$
$$\Downarrow$$
$$b := a - b . \ a := 2xa - b$$
$$\Downarrow$$
$$b := a - b . \ a' = 2xa - b \land b' = b$$
$$\Downarrow$$
$$a' = a + b \land b' = a - b$$

(c) 
$$a := ? \parallel b := ?$$
$$\Downarrow$$
$$a := a + b \parallel b := a - b$$
$$\Downarrow$$
$$a' = a + b \land b' = a - b$$