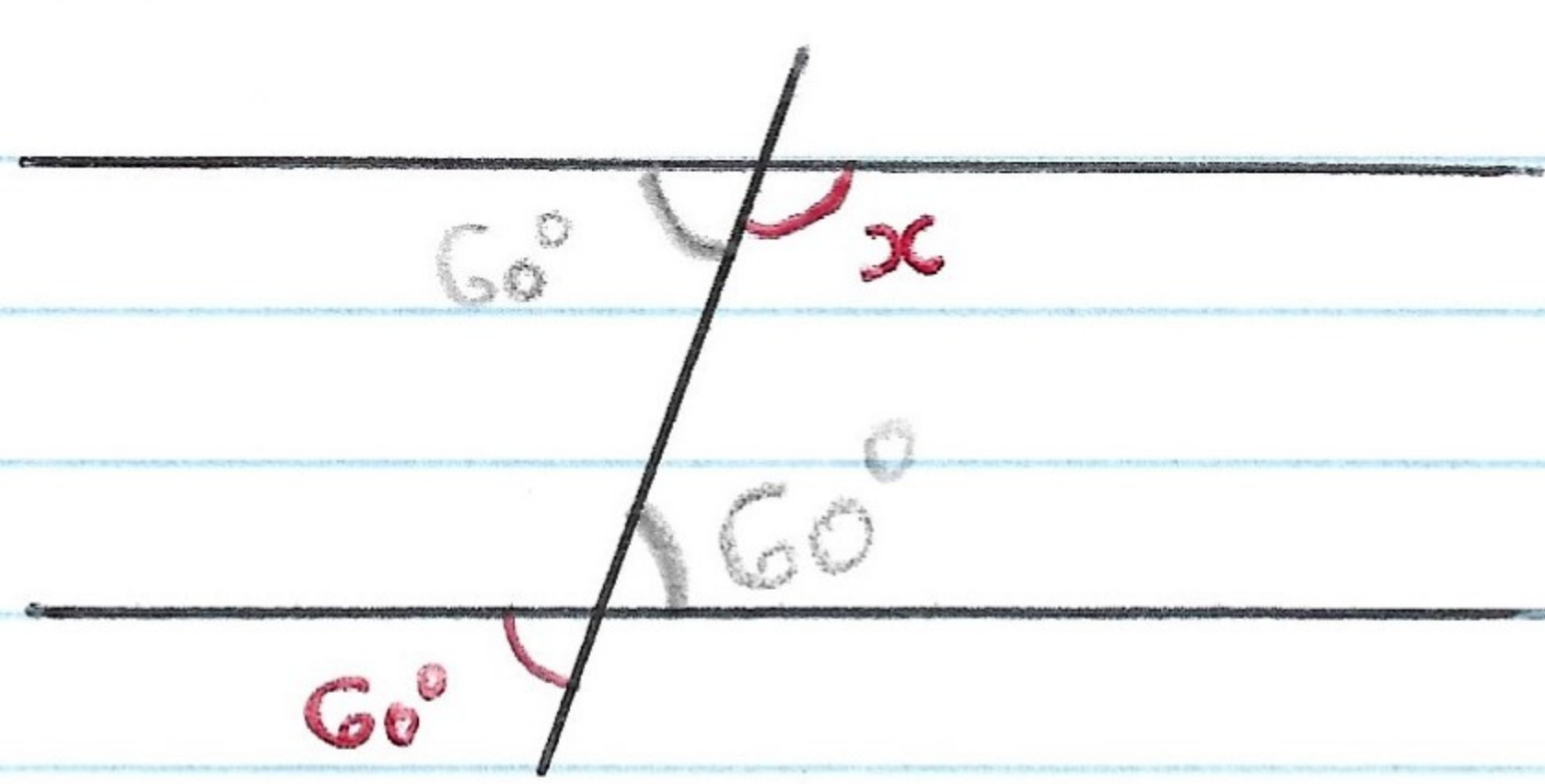


①

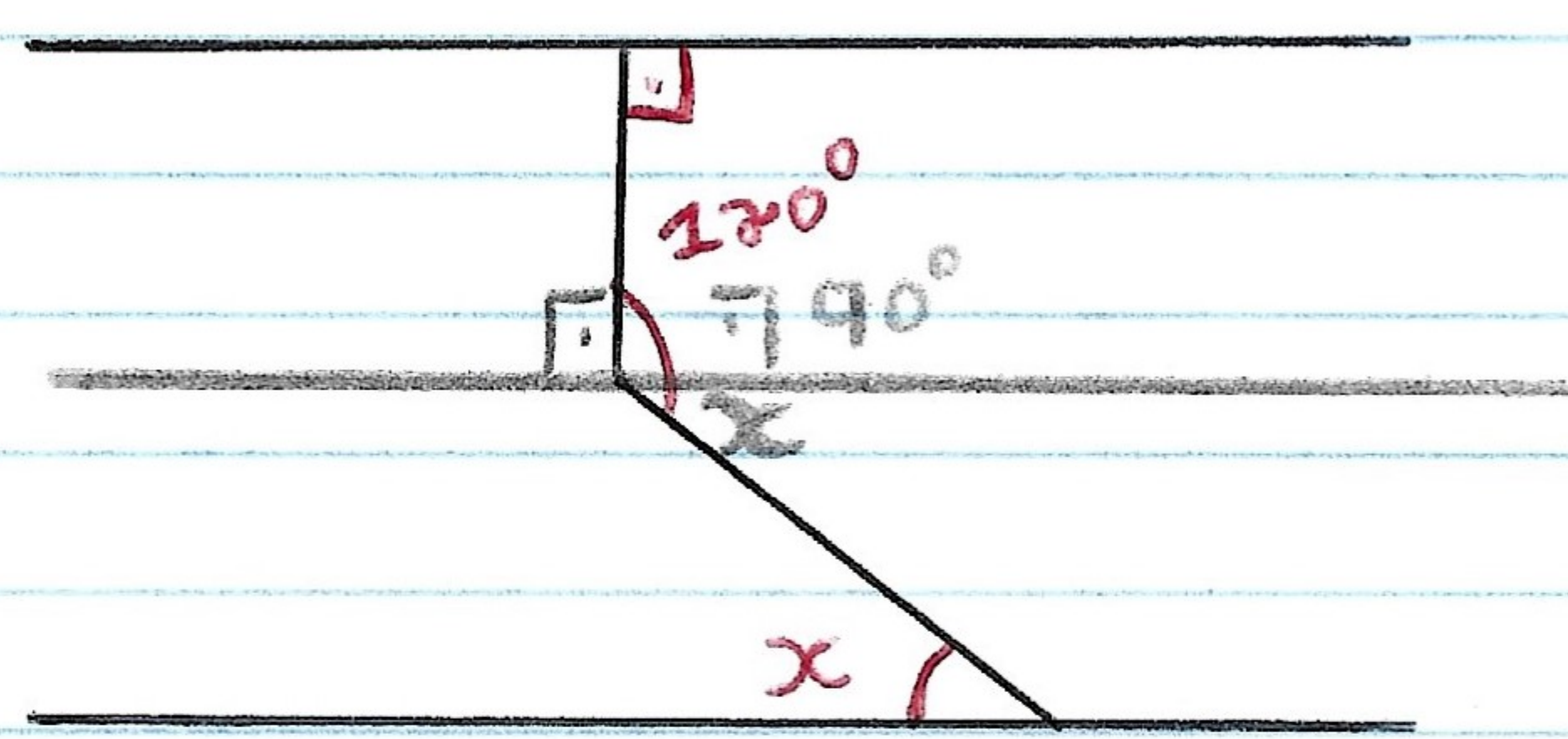


$$60^\circ + x = 180^\circ$$

$$x = 180^\circ - 60^\circ$$

$$x = 120^\circ \quad (C)$$

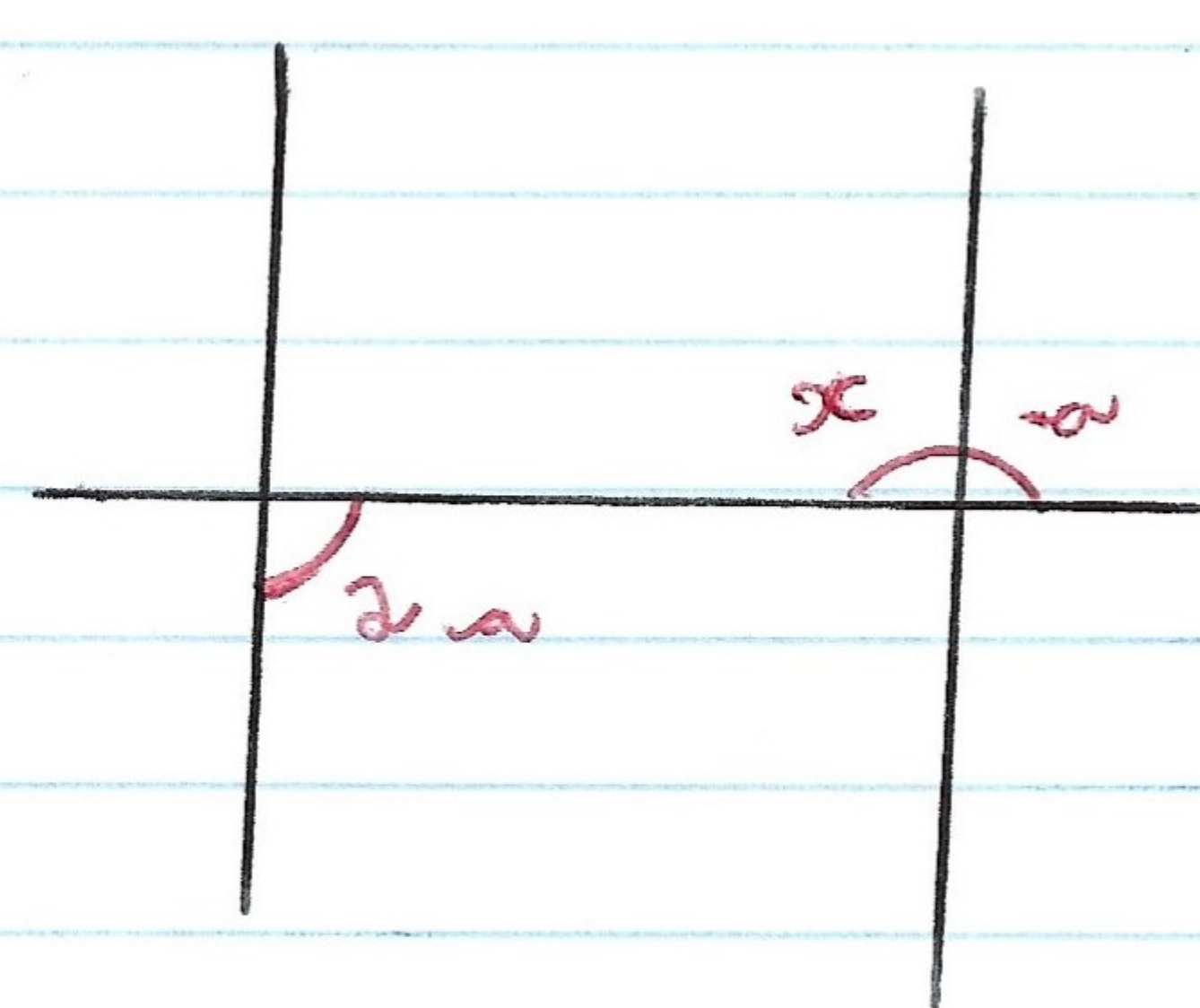
②



$$x = 120^\circ - 90^\circ$$

$$x = 30^\circ \quad (B)$$

③



$$x + a = 180^\circ \text{ e } 2a = x$$

$$\therefore 2a + a = 180^\circ$$

$$3a = 180^\circ$$

$$a = \frac{180^\circ}{3} = 60^\circ$$

Send a  $a = 60^\circ$ , temos:

$$x + 60^\circ = 180^\circ$$

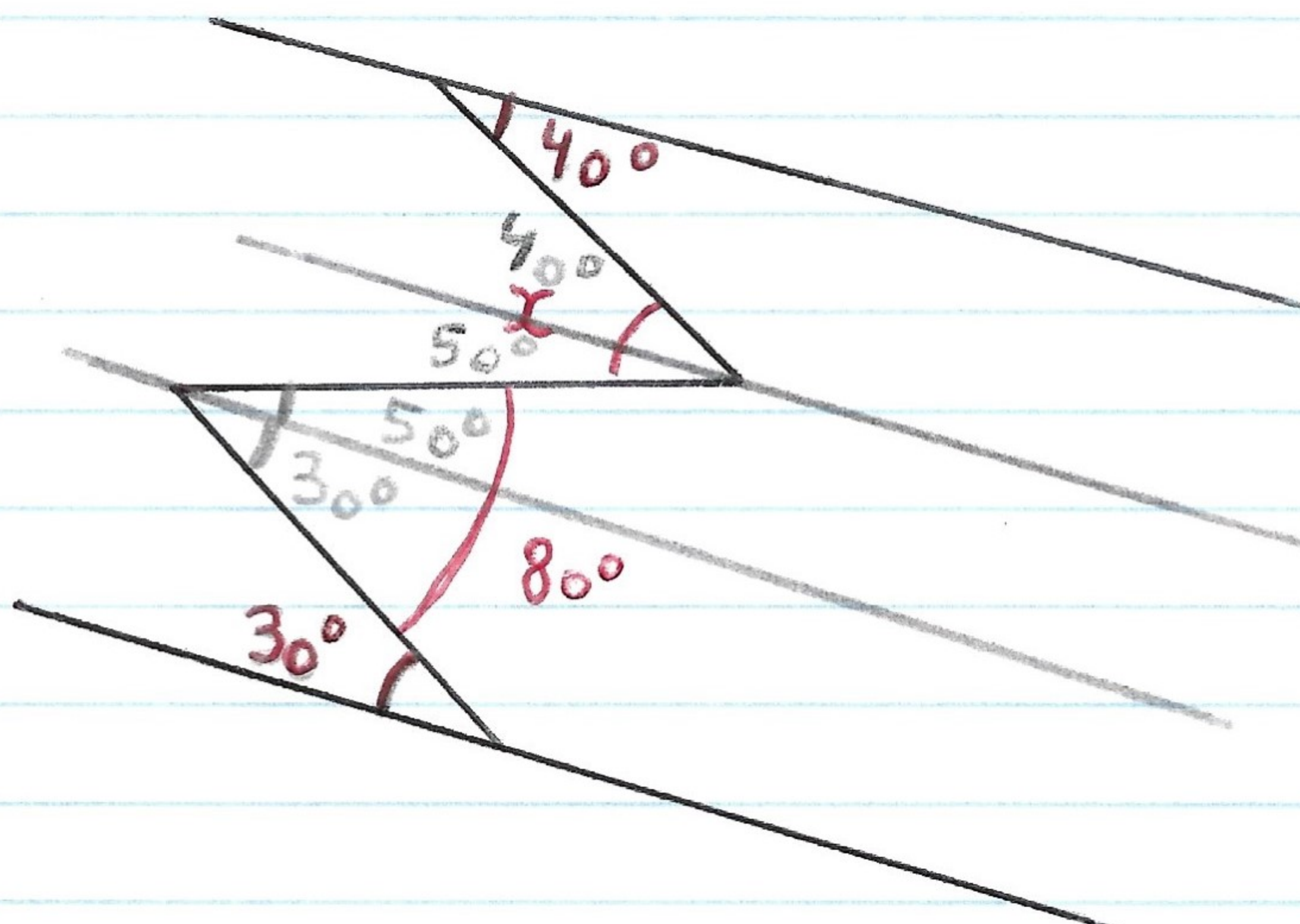
$$x = 180^\circ - 60^\circ$$

$$x = 120^\circ$$

$$x = 120^\circ \quad (D)$$



④



Com traçar mais duas paralelas e encontrar ângulos congruentes, temos:  $x = 50^\circ + 40^\circ = 90^\circ$

R:  $x = 90^\circ$

$$\textcircled{5} \quad x = \frac{5}{4} \cdot (180^\circ - x)$$

$$4x = 5 \cdot (180^\circ - x)$$

$$4x = 900^\circ - 5x$$

$$5x + 4x = 900^\circ$$

$$9x = 900^\circ$$

$$x = \frac{900}{9} = 100$$

(A)  $x = 100^\circ$



$$\textcircled{6} \quad x = \frac{(90^\circ - x)}{2}$$

$$2x = 90^\circ - x$$

$$2x + x = 90^\circ$$

$$3x = 90^\circ$$

$$x = \frac{90^\circ}{3} = 30^\circ$$

$$(A) \quad x = 30^\circ$$

$$\textcircled{7} \quad 3 \cdot (90^\circ - x) = \frac{1}{3} \cdot (180^\circ - x)$$

$$3 \cdot 3 \cdot (90^\circ - x) = 1 \cdot (180^\circ - x)$$

$$9 \cdot (90^\circ - x) = 180^\circ - x$$

$$810^\circ - 9x = 180^\circ - x$$

$$810^\circ = 180^\circ - x + 9x$$

$$810^\circ = 180^\circ + 8x$$

$$8x = 810^\circ - 180^\circ$$

$$8x = 630^\circ$$

$$x = \frac{630^\circ}{8} = 78,75 = 78^\circ 45'$$

$$(E) \quad x = 78^\circ 45'$$