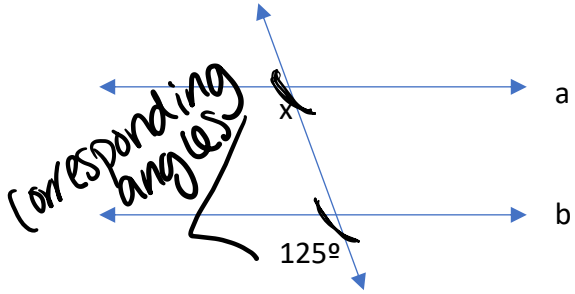
PROVING LINES ARE PARALLEL

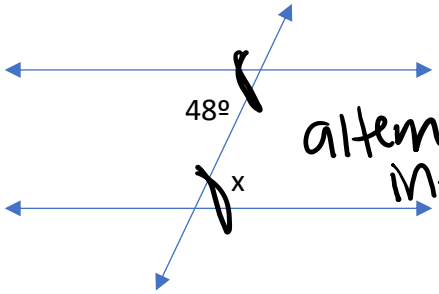
Find the value of *x* so that $a \parallel b$.

1) X=125



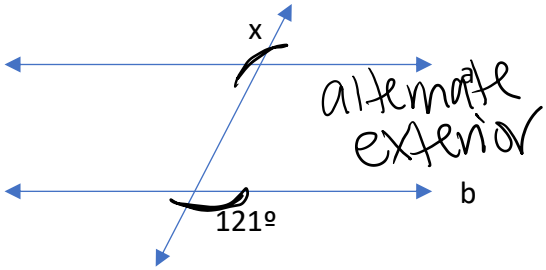
corresponding angles

2) x=48



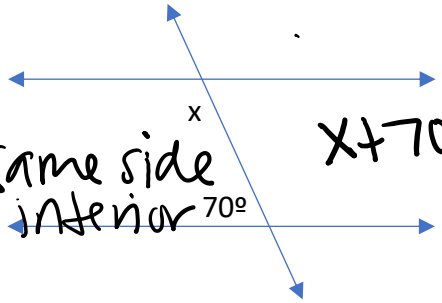
alternate interior angles

3) x=121



alternate exterior

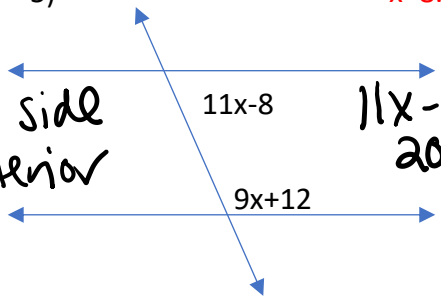
4) x=110



same side interior

$x+70=180$

5) x=8.8



same side interior

$11x-8+9x+12=180$

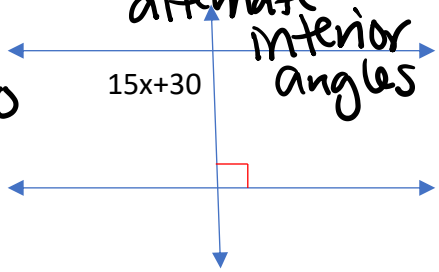
$20x+4=180$

$-4 \quad -4$

$\frac{20x}{20}=\frac{176}{20}$

$x=8.8$

6) x=4



alternate interior angles

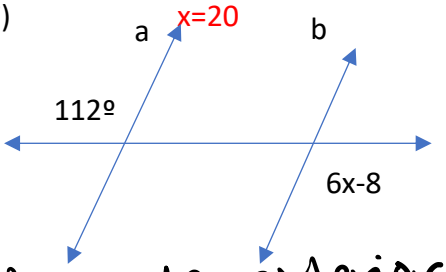
$15x+30=90$

$-30 \quad -30$

$\frac{15x}{15}=\frac{60}{15}$

$x=4$

7) x=20



alternate exterior angles

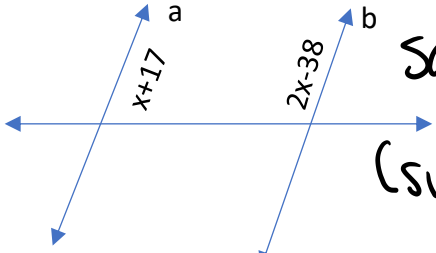
$112=6x-8$

$+8 \quad +8$

$\frac{120}{6}=\frac{6x}{6}$

$x=20$

8) x=67



same side interior (supplementary)

$x+17+2x-38=180$

$3x-21=180$

$+21 \quad +21$

$\frac{3x}{3}=\frac{201}{3}$

$x=67$