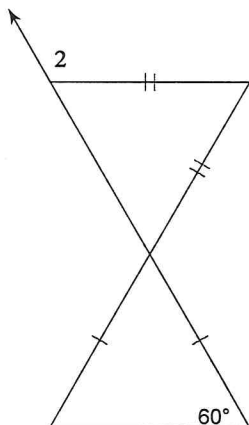


OPTIONAL - Level 4 Practice

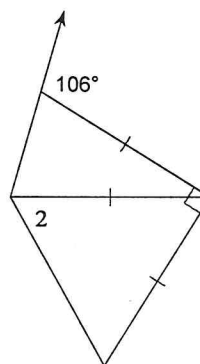
Find the value of x .

1) $m\angle 2 = 20x$



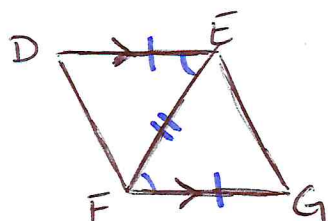
$x = 6$

2) $m\angle 2 = x + 72$



$x = -11$

PROVE THE FOLLOWING. BE SURE TO MARK YOUR DIAGRAMS APPROPRIATELY.



GIVEN: $\overline{DE} \parallel \overline{FG}$, $\overline{DE} \cong \overline{GF}$

PROVE: $\overline{FD} \parallel \overline{EG}$

STATEMENTS	REASONS
$\overline{DE} \parallel \overline{FG}$, $\overline{DE} \cong \overline{GF}$	GIVEN
$\angle DEF \cong \angle GFE$	ALT. INT. $\angle$ s $\cong$
$\overline{EF} \cong \overline{FE}$	REFLEXIVE PROP.
$\triangle DEF \cong \triangle GFE$	SAS
$\angle DFE \cong \angle GEF$	CPCTC
$\overline{FD} \parallel \overline{EG}$	IF ALT. INT. $\angle$ s $\cong$, LINES $\parallel$