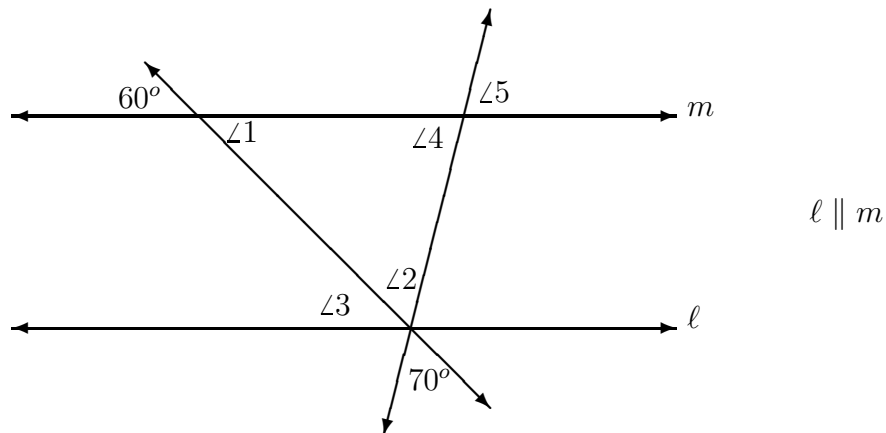
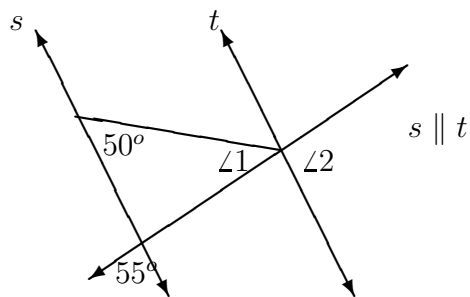


Find the measurement of each numbered angle, justifying with a short explanation.

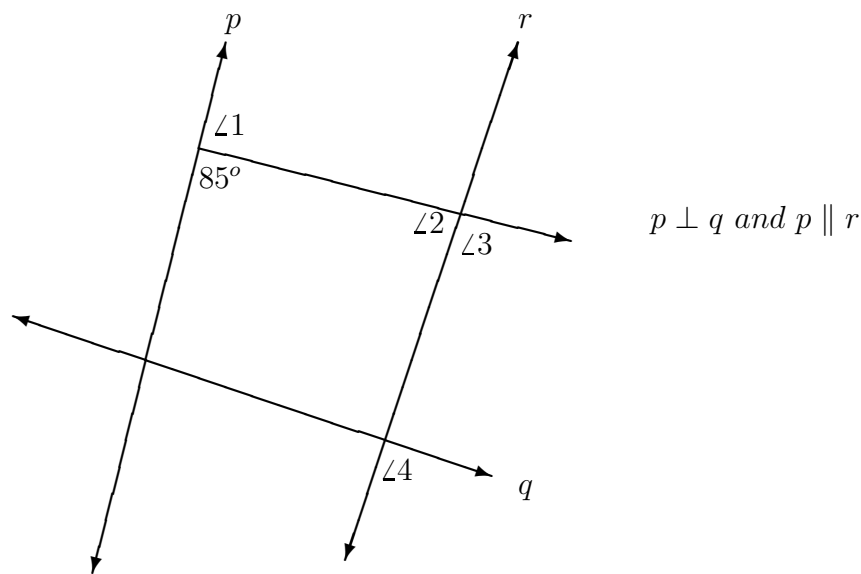
1.



2.



3.



1.

$\angle 1$ measures 60° because it's vertical with the given 60° angle.

$\angle 2$ measures 70° because it's vertical with the given 70° angle.

$\angle 3$ measures 60° because it's alternate interior with $\angle 1$.
(or, because it's corresponding with the given 60° angle)

$\angle 4$ measures 50° because it completes a (180°) triangle with $60^\circ \angle 1$ and $70^\circ \angle 2$.

$\angle 5$ measures 50° because it's vertical with $\angle 4$.

2.

$\angle 1$ measures 75° : it completes a triangle with the given 50° and with the vertical angle to the given 55° angle (so that vertical angle is also 55°).

$\angle 2$ measures 125° because it's corresponding with the supplement to the given 55° angle (so the supplement measures 125°).

3.

$\angle 1$ measures 95° because it's supplementary (or, it's part of a linear pair) with the given 85° angle.

$\angle 2$ measures 95° because it's alternate interior with $\angle 1$.

$\angle 3$ measures 85° because it's supplementary with $\angle 2$. (Or, because it's corresponding with the given 85° angle.)

$\angle 4$ measures 90° because it's corresponding with an angle at the intersection of p and q , all of which measure 90° .