

May 8th

What size is the acute angle between the minute and hour hands of a clock at 19:45?

The minute hand is pointing at the 9

The hour hand is $\frac{3}{4}$ way between the 7 and 8

Angle between the 7 and 8 is $360^\circ \div 12 = 30^\circ$

Angle between 8 and the minute hand = $30^\circ \div 4 = 7.5^\circ$

Angle between hands = $30^\circ + 7.5^\circ = \mathbf{37.5^\circ}$