



Problem 25

TWO DIRECTION OBSERVATIONS ARE MADE FROM AN INSTRUMENT, ONE AT $0^\circ \pm$ TO A SIGHT AT $540' \pm$ AWAY AND ONE AT $90^\circ \pm$ TO A SIGHT AT $900' \pm$ AWAY. IF THE INSTRUMENT WAS SET UP $0.02'$ OFF THE STATION, IN WHAT DIRECTION (TO THE NEAREST DEGREE) WOULD IT CAUSE THE LEAST ERROR? THE MOST?

