Hint ID	Help Type	Direction	Motivation of help	
208-P2-02	NextStep	S	OpenNodeInWorkingConjunctiveJustification	S
208-P1-04	NextStep	S	OpenNodeFullyJustified (can't tell top- or bottom-most)	S
205-P2-04	NextStep	FC	OpenStepFullyJustifiedBottomMost	S
209-P4-03	NextStep	FC	OpenStepFullyJustifiedBottomMost	S
202-P1-01	NextStep	S	OpenStepPartiallyJustified (can't tell top- or bottom-most)	F
203-P1-02	NextStep	-	OpenStepPartiallyJustified (can't tell top- or bottom-most)	F
207-P1-01	NextStep	S	OpenStepPartiallyJustified (can't tell top- or bottom-most)	F
202-P2-02	NextStep	S	OpenStepPartiallyJustifiedTopMost	S
207-P2-01	NextStep	S	OpenStepPartiallyJustifiedTopMost	S
208-P2-03	NextStep	FC	OpenStepPartiallyJustifiedTopMost	S
	10			
207-P2-03	Justification		A bad help. T provided AW-P on a decendant, not directly relating the target step	
203-P1-01	Justification		AW-P for a step. S floundered, but NegWhy eventually led S to a correct justification.	S
209-P2-02	Justification		AW-P(the target step)	
202-P2-03	Justification		Bottom up for a step	
208-P1-03	Justification		Bottom up for a step	S
209-P4-04	Justification		Bottom up hint along with a path down from an open premise.	
203-P1-04	Justification		Bottom up.	S
209-P4-02	Justification		Bottom up.	
205-P2-02	Justification		For a step whose premise is given	
205-P2-03	Justification		For a triangle congruent.	
207-P2-04	Justification		For a triangle congruent. PP-P on one of premises, where others are mentioned.	
209-P2-03	Justification		Help on a premise, and AC-R(Premise->Conclusion)	
208-P2-04	Justification			
208-P2-05	Justification			
	14			
205-P2-01	KickOff		HintGoal followd by AP-W	
	1			
	25			

(S)ucceeded: S made at least one reasonable contribution. (F)ailed: S floundered

Hint ID	Help Type		Motivation of help	
202-P2-01	Construction			
208-P2-01	Construction			
209-P4-01	Construction			
207-P1-02	(why)			F
207-P2-02	(why)			
209-P2-01	(why)			
203-P1-03	(Not H-GOMS)		Didn't work. S floundered	F
208-P1-01	(Not H-GOMS)		A hint seems not to have any connection to student's effort so far.	F
208-P1-02	(Not H-GOMS)		A hint seems not to have any connection to student's effort so far.	S

FC: Forward Chain, BC: Backward Chain, S: Single Step (node)