

HP-35s Calculator Program –

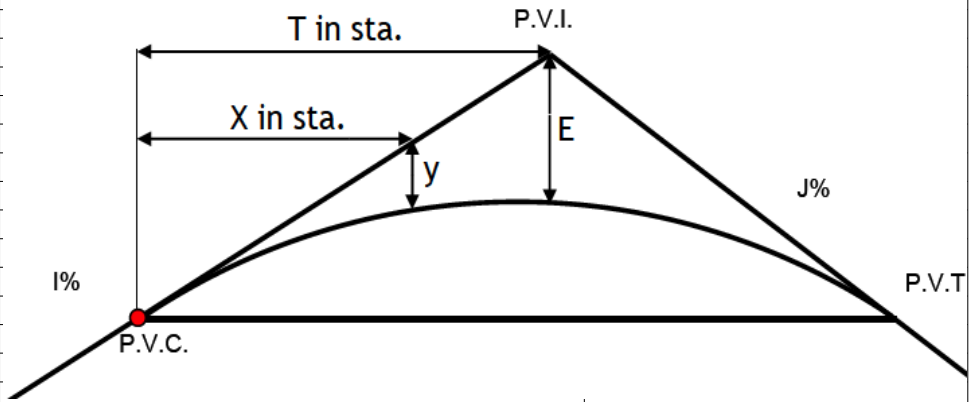
PARABOLIC VERTICAL CURVE

Author: J. E. Charalambides

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Line	Instruction	Process	User Instruction
L001	LBL V		
L002	CLSTK		→ CLEAR 5
L003	SF10		← FLAGS _ 1 _ (.) _ (0)
L004	VERT CURV		Key in using EQN, RCL M, RCL O, et
L005	PSE		
L006	BACK GRADIENT		
L007	PSE		Nomenclature:
L008	INPUT I		
L009	FORWD GRADIENT		
L010	PSE		
L011	INPUT J		
L012	LENGTH OF CURVE		
L013	PSE		
L014	INPUT L		
L015	2		
L016	÷		
L017	STO T		
L018	VIEW T		
L019	RCL I		
L020	RCL J		
L021	-		
L022	RCL L		
L023	÷		
L024	STO R		
L025	VIEW R		
L026	EXT DIST		
L027	PSE		
L028	RCL I		
L029	RCL J		
L030	-		
L031	RCL L		
L032	×		
L033	8		
L034	÷		
L035	STO E		
L036	VIEW E		
L037	IS STATION		
L038	PSE		
L039	PVC AVAILABLE		
L040	PSE		
L041	INPUT C		
L042	x=0?		
L043	GTO V057		
L044	RCL L		
L045	+		
L046	STO A		
L047	RCL T		
L048	-		
L049	STO B		
L050	STA PVI		
L051	PSE		
L052	VIEW B		
L053	STA PVT		
L054	PSE		
L055	VIEW A		
L056	GTO V096		
L057	IS STATION PVI		
L058	PSE		



L059	AVAILABLE		
L060	PSE		
L061	INPUT B		
L062	x=0?		
L063	GTO V077		
L064	RCL T		
L065	-		
L066	STO C		
L067	RCL C		
L068	+		
L069	STO A		
L070	STA PVC		
L071	PSE		
L072	VIEW C		
L073	STA PVT		
L074	PSE		
L075	VIEW A		
L076	GTO V096		
L077	IS STATION PVT		
L078	PSE		
L079	AVAILABLE		
L080	PSE		
L081	INPUT A		
L082	x=0?		
L083	GTO V254		
L084	RCL L		
L085	-		
L086	STO C		
L087	RCL T		
L088	+		
L089	STO B		
L090	STA PVC		
L091	PSE		
L092	VIEW C		
L093	STA PVI		
L094	PSE		
L095	VIEW B		
L096	IS ELEV PVC		
L097	PSE		
L098	AVAILABLE		
L099	PSE		
L100	INPUT O		
L101	x=0?		
L102	GTO V124		
L103	RCL B		
L104	RCL C		
L105	-		
L106	RCL I		
L107	x		
L108	+		
L109	STO P		
L110	RCLA		
L111	RCL B		
L112	-		
L113	RCL J		
L114	x		
L115	+		
L116	STO Q		
L117	ELEV PVI		
L118	PSE		
L119	VIEW P		
L120	ELEV PVT		
L121	PSE		
L122	VIEW Q		
L123	GTO V180		

L124	IS ELEV PVI		
L125	PSE		
L126	AVAILABLE		
L127	PSE		
L128	INPUT P		
L129	x=0?		
L130	GTO V153		
L131	RCL B		
L132	RCL C		
L133	-		
L134	RCL I		
L135	x		
L136	-		
L137	STO O		
L138	RCL A		
L139	RCL B		
L140	-		
L141	RCL J		
L142	x		
L143	RCL P		
L144	+		
L145	STO Q		
L146	ELEV PVC		
L147	PSE		
L148	VIEW O		
L149	ELEV PVT		
L150	PSE		
L151	VIEW Q		
L152	GTO V180		
L153	IS ELEV PVT		
L154	PSE		
L155	AVAILABLE		
L156	PSE		
L157	INPUT Q		
L158	x=0?		
L159	GTO V254		
L160	RCL A		
L161	RCL B		
L162	-		
L163	RCL J		
L164	x		
L165	-		
L166	STO P		
L167	RCL B		
L168	RCL C		
L169	-		
L170	RCL I		
L171	x		
L172	-		
L173	STO O		
L174	ELEV PVC		
L175	PSE		
L176	VIEW O		
L177	ELEV PVI		
L178	PSE		
L179	VIEW P		
L180	HI LO POINT		
L181	PSE		
L182	RCL I		
L183	RCL R		
L184	+		
L185	RCL C		
L186	+		
L187	STO D		
L188	STA HI PT		

L189	PSE		
L190	VIEW D		
L191	RCL C		
L192	-		
L193	STO X		
L194	RCL T		
L195	$x \geq y?$		
L196	GTO V220		
L197	RCL L		
L198	RCL X		
L199	-		
L200	x^2		
L201	RCL E		
L202	\times		
L203	RCL T		
L204	x^2		
L205	\div		
L206	STO Y		
L207	+/-		
L208	RCL C		
L209	RCL X		
L210	+		
L211	RCL B		
L212	-		
L213	RCL J		
L214	\times		
L215	+		
L216	RCL P		
L217	+		
L218	STO U		
L219	GTO V240		
L220	RCL X		
L221	x^2		
L222	RCL E		
L223	\times		
L224	RCL T		
L225	x^2		
L226	\div		
L227	STO Y		
L228	+/-		
L229	RCL B		
L230	RCL C		
L231	-		
L232	RCL X		
L233	-		
L234	RCL I		
L235	\times		
L236	-		
L237	RCL P		
L238	+		
L239	STO U		
L240	OFFSET		
L241	PSE		
L242	VIEW Y		
L243	ELEV AT X		
L244	PSE		
L245	VIEW U		
L246	TRY ANOTHER		
L247	PSE		
L248	X DISTANCE		
L249	PSE		
L250	INPUT X		
L251	$x \neq 0?$		
L252	GTO V194		
L253	STOP		