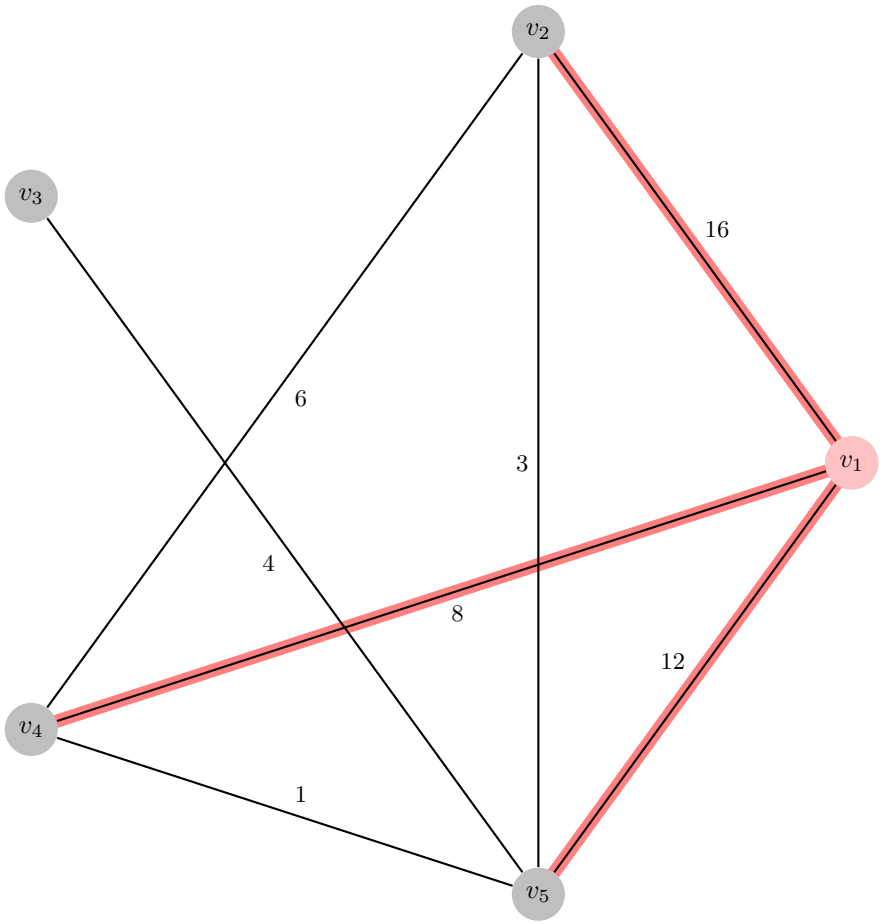
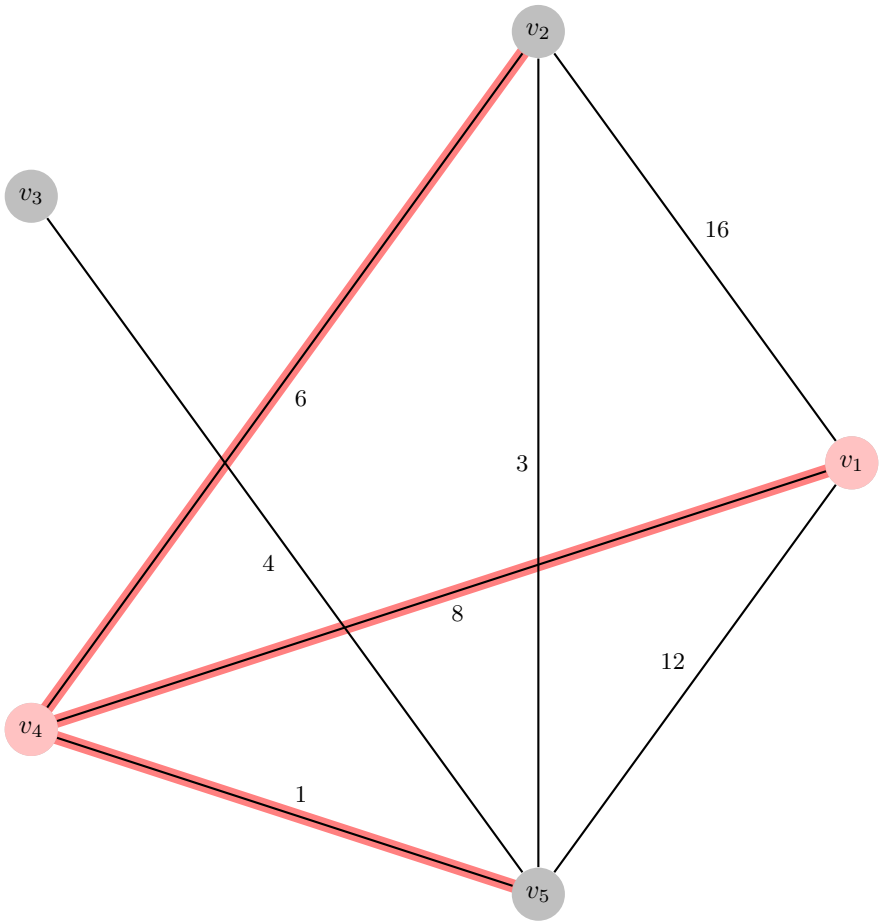
vertex	shortest path	length
v_2	$v_1 \rightarrow v_2$	16
v_3	$null$	∞
v_4	$v_1 \rightarrow v_4$	8
v_5	$v_1 \rightarrow v_5$	12



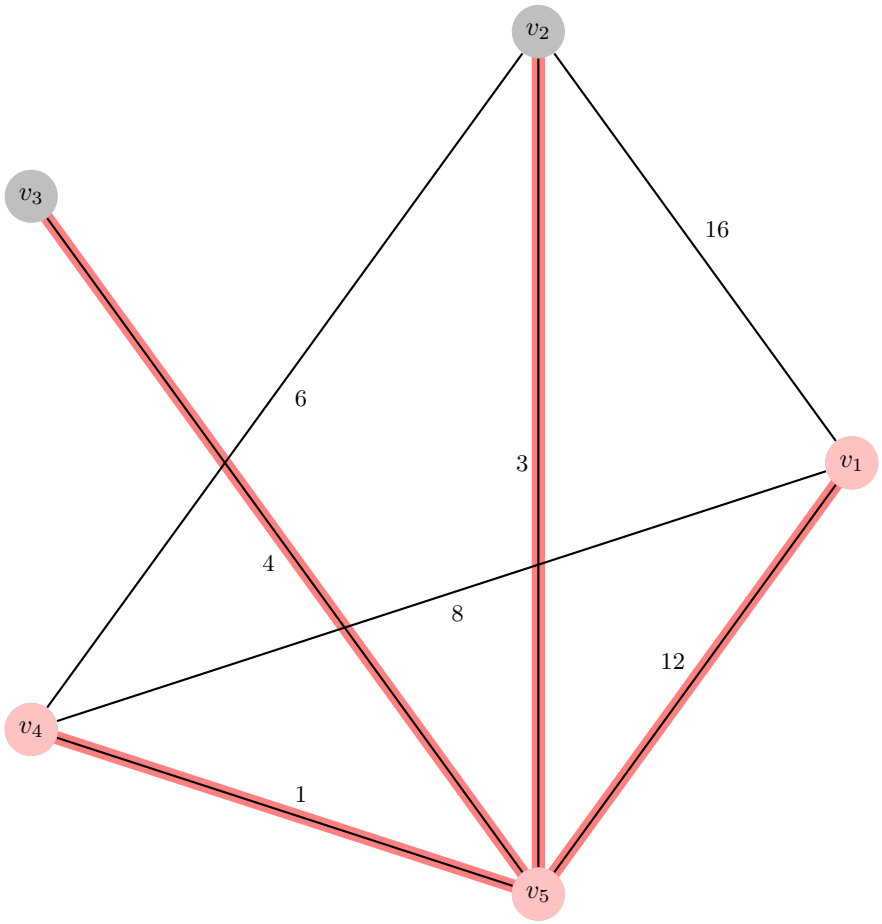
Vertices explored from v_1. Next vertex is v_4. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_4 \to v_2$	$14 = \mathbf{min\{16,\ 8+6\}}$
v_3	*null*	∞
v_4	$v_1 \to v_4$	8
v_5	$v_1 \to v_4 \to v_5$	$9 = \mathbf{min\{12,\ 8+1\}}$



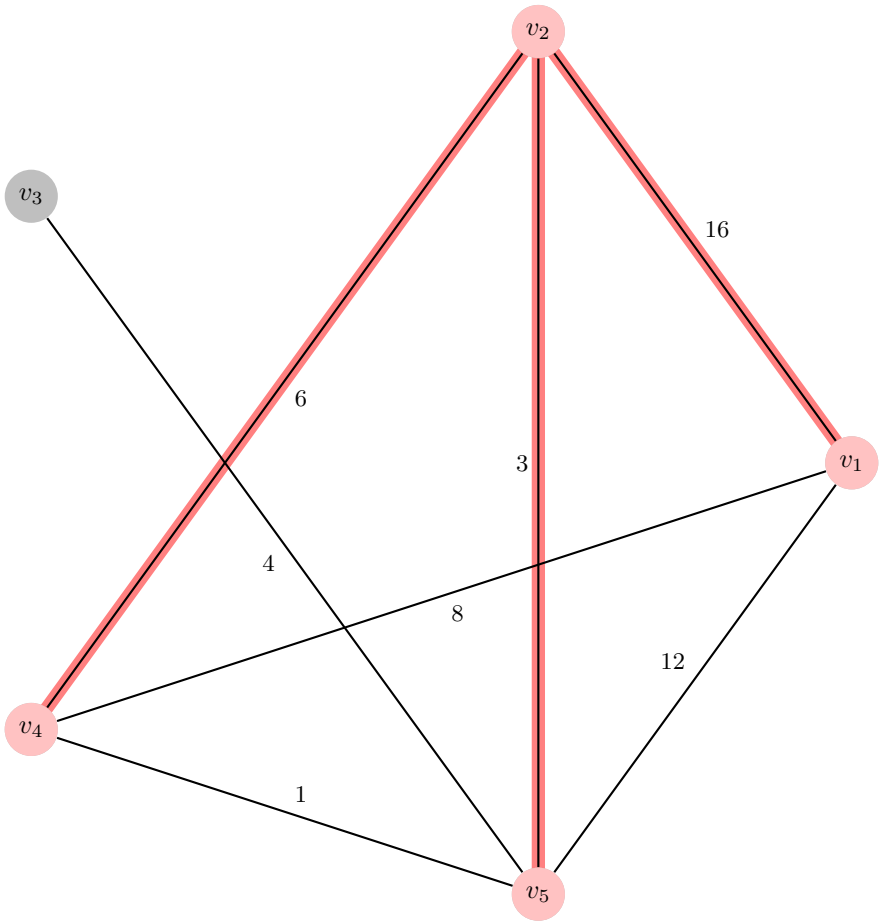
Vertices explored from v_4. Next vertex is v_5. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_4 \to v_5 \to v_2$	$12 = \mathbf{min\{14,\ 9{+}3\}}$
v_3	$v_1 \to v_4 \to v_5 \to v_3$	$13 = \min\{\infty,\ 9{+}4\}$
v_4	$v_1 \to v_4$	$8 = \min\{8,\ 9{+}1\}$
v_5	$v_1 \to v_4 \to v_5$	9



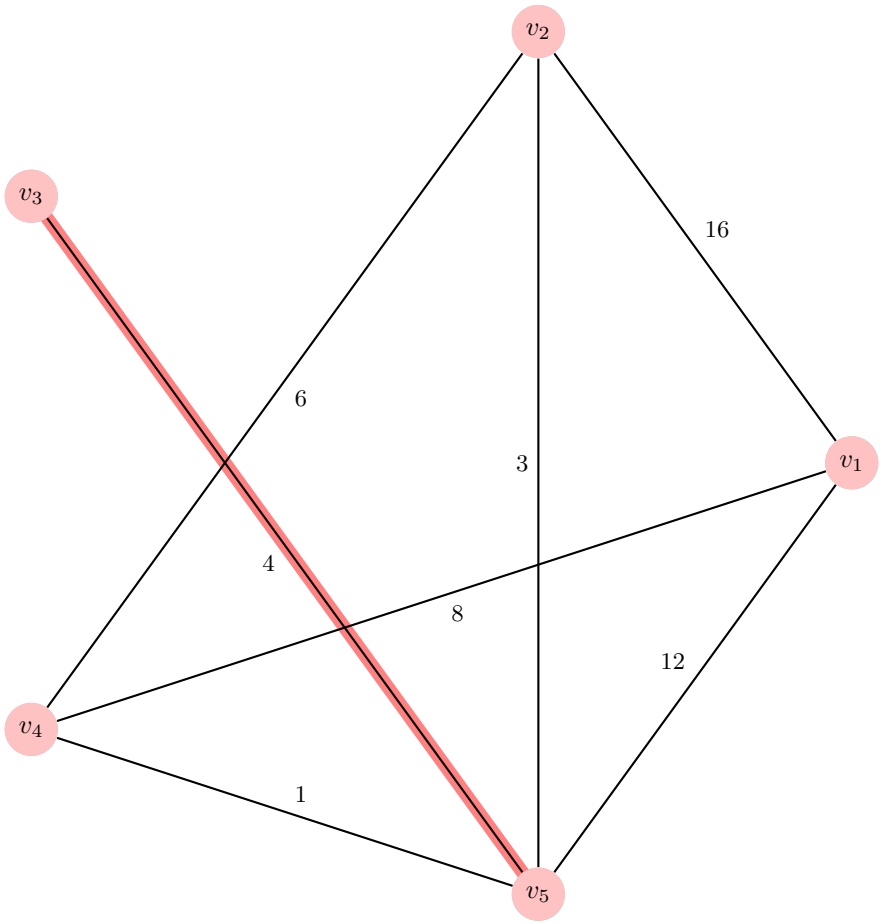
Vertices explored from v_5. Next vertex is v_2. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_4 \to v_5 \to v_2$	12
v_3	$v_1 \to v_4 \to v_5 \to v_3$	13
v_4	$v_1 \to v_4$	$8 = \min\{8, 12{+}6\}$
v_5	$v_1 \to v_4 \to v_5$	$9 = \min\{9, 12{+}3\}$



Vertices explored from v_2. Next vertex is v_3. Edge relaxations shown in **bold**.

vertex	shortest path	length
v_2	$v_1 \to v_4 \to v_5 \to v_2$	12
v_3	$v_1 \to v_4 \to v_5 \to v_3$	13
v_4	$v_1 \to v_4$	8
v_5	$v_1 \to v_4 \to v_5$	$9 = \min\{9, 13{+}4\}$



Vertices explored from v_3. Next vertex is v_3. Edge relaxations shown in **bold**.