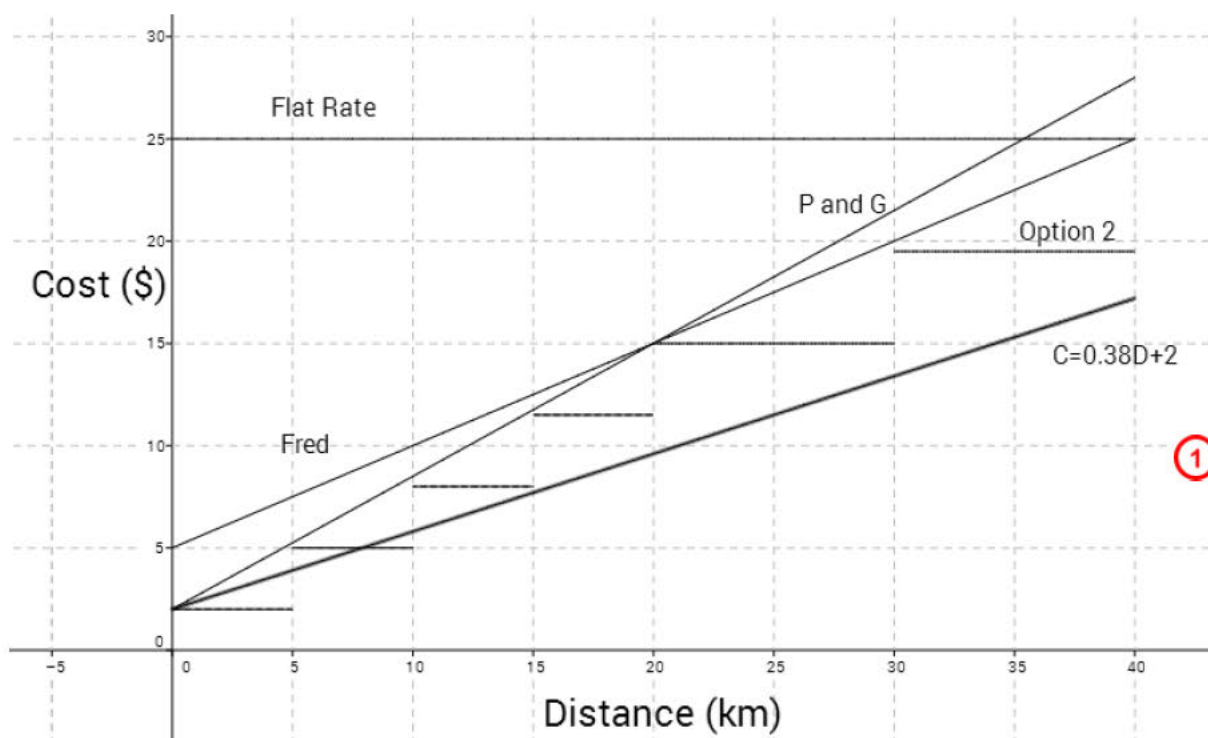


Student 1: Low Excellence
 NZQA Intended for teacher use only



	City Centre	Port	Bethlehem
Fred's Taxi Company	13.5	17	27.5
P and G Taxi Company	13.05	17.6	31.25
Flatrate Taxi Company	25	25	25

Best company to use to travel to the City Centre and the Port is Fred's Taxi Company because it the cheapest rate to the Port and the second cheapest to the City Centre. ②

It would be cheaper to use P and G for any distance less than 20km. ③

Fred could change his charge per km and also his fixed charge.

An example would be $C = 0.38D + 2$. C = cost, D = distance in km. ④

Another way Fred could make his company the cheapest would be to offer a fixed rate per distance.

\$2 up to 5km	\$5 up to 10km	\$8 up to 15km
\$11.50 up to 20km	\$15 up to 30km	\$19.50 up to 40km
\$24 up to 60 km	\$30 for anything above 60 km	

My graph shows that these are cheaper options because the graphs of these two options are always below the graphs of the first three options. ⑤

Fred will be cheaper with both but the second is better because Fred would make more money with it in most cases up to 40km.