

12. Information on the bus fares for a single trip at different fare stages is summarised in the following table.

Fare stage*	EZ-Link card		Cash	
	Aircon	Non-aircon	Aircon	Non-aircon
0 to 4	\$0.67	\$0.62	\$0.90	\$0.80
4.5 to 7	\$0.89	\$0.74	\$1.10	\$0.90
7.5 to 10	\$1.09	\$0.84	\$1.30	\$1.00
10.5 to 13	\$1.19	\$0.94	\$1.40	\$1.10
13.5 to 18	\$1.29	\$1.04	\$1.50	\$1.20
18.5 to 23	\$1.39	\$1.14	\$1.60	\$1.30
23.5 to 29	\$1.48	\$1.23	\$1.70	\$1.40
> 29	\$1.58	\$1.33	\$1.80	\$1.50

* Each fare stage ≈ 0.8 km.

- (a) Find the bus fare payable by a passenger who travels
- 6 fare stages on an air-conditioned bus using an EZ-Link card,
 - 11 fare stages on a non-air-conditioned bus using cash,
 - 21.2 km on an air-conditioned bus using cash.
- (b) Sam and Lydia travelled together on an air-conditioned bus for a trip from a bus interchange to the East Coast. They paid \$2.58 in total using their EZ-Link cards. Find the range of the possible distances from the bus interchange to the East Coast.
13. Diagram A shows the approximate conversion graph for grams and troy ounces. Diagram B shows the graph of the price of gold (in thousand dollars) against its mass (in troy ounces) on a particular day.

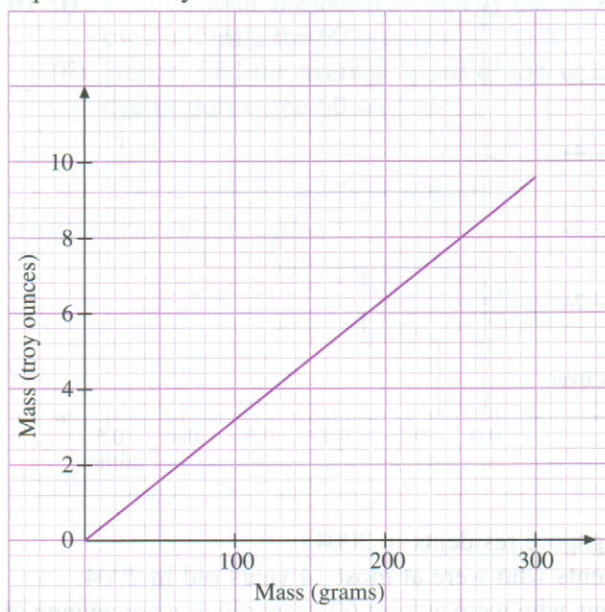


Diagram A

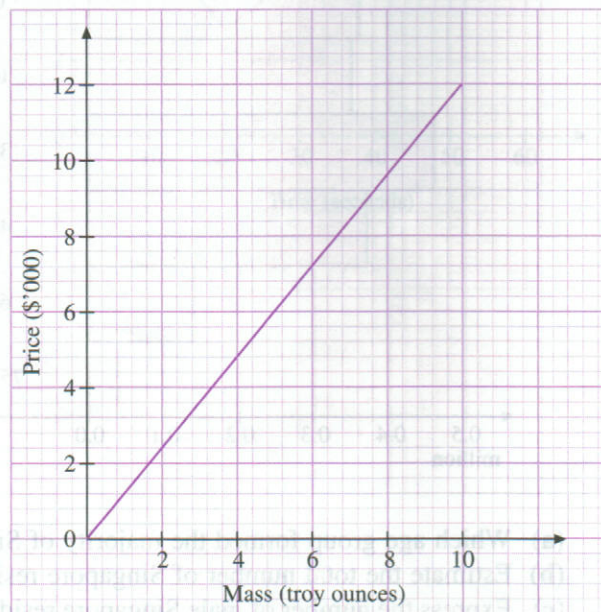


Diagram B

- (a) Use diagram A to convert 1 kg to troy ounces.
- (b) Use diagram B to estimate the cost of 4 troy ounces of gold.
- (c) Use diagrams A and B to estimate
- the price of 200 g of gold,
 - the mass in grams of gold that is worth \$9600.