

DIRECT PROPORTION

APPLICATIONS

DRAG CAR FUEL



There are several different types of drag cars whose speeds vary significantly depending on the different types of car body shape, engine sizes and modifications and fuel.

Top fuel dragsters have a long and narrow body shape, large back tyres and small front tyres. Because they reach very high speeds, race distances are only 304 metres (1000 feet in the old Imperial System still used in the USA).

Funny cars look like standard cars but with the rear wheels moved forward to improve the weight transfer under acceleration and to increase on the rear tyres for stability at high speeds. When they were built in the 1060's, some people thought they looked "funny" and that name has become their popular name. Funny cars race over 402 metres (1320 feet or a quarter-mile in the old Imperial System).



Many drag cars run on an expensive fuel mixture which is 90% nitro-methane and 10% methanol. In a single run, a car can burn about 60 Litres of fuel. In one race meeting, cars may race up to 3 times.

| TYPE OF DRAG CAR | NAME OF DRIVER | NUMBER OF RACES RUN | FUEL CONSUMED EACH RACE | COST OF FUEL PER LITRE | TOTAL COST OF FUEL FOR THIS RACE MEETING |
|------------------|----------------|---------------------|-------------------------|------------------------|--|
| Top fuel | I. Speed | 3 races | 57 L | \$ 250 | |
| Top fuel | D. Monn | 2 races | 52 L | \$ 250 | |
| Funny car | H.A. Haha | 1 race | 43.5 L | \$ 250 | |
| Funny car | I.M.A. Joke | 2 races | 44.8 L | \$ 250 | |

Q1. Calculate the cost of fuel for the cars for one race meeting as shown in the table above.

Q2. I.M.A.Joke finds a new sponsor, a fuel company, who offers a discount of 15% on all his fuel. What would the total cost of his fuel shown above after a 15% discount?

ANSWERS

Q1.

I.Speed \$42750

D.Monn \$26000

H.A.Haha \$10875

I.M.A.Joke \$22400

Q2. Discount = \$3360

Discounted cost = \$19040