INDIGO D

1)
$$1\frac{1}{2} \div 2\frac{5}{8}$$

3)
$$3.14159 \times 5^2$$

- 4) Jennifer says that $\frac{6}{8} \times \frac{4}{6} = \frac{1}{2}$. Is she correct? Show all your working.
- 5) If it takes 5 men 25 days to lay 1km of road, how many days will it take 10 men to build 20km of road?
- 6) You may use a calculator for this question.

1 US Gallon is 3.78541 litres. A car has a fuel tank of 70 litres. How many US Gallons is the fuel tank? (1.d.p)

7) The kinetic energy of a body is given by the formula

$$E = \frac{1}{2}mv^2$$

where m is the mass of the body and v is its speed. Find the kinetic energy of a man running at 8m/s and with mass 75kg.

8) You may use a calculator for this question.

Jack drives from Paris to Nice at an average speed of 45mph. It took him 9 hours.

In petrol it costs Jack €0.32 per mile.

If the conversion rate is £1 = €1.40 how much will the petrol cost in £s?