# HOLY@TRINITY INDIGO D 

1) $1 \frac{1}{2} \div 2 \frac{5}{8}$
2) $3742 \div 15$
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 1 km of road, how many days will it take 10 men to build 20 km 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

$$
E=\frac{1}{2} m v^{2}
$$

where $m$ is the mass of the body and $v$ is its speed.
Find the kinetic energy of a man running at $8 \mathrm{~m} / \mathrm{s}$ and with mass 75 kg .
8) You may use a calculator for this question.

Jack drives from Paris to Nice at an average speed of 45 mph . 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 $£ s$ ?

