

Problem solving: distances - answers

1.

Step 1 Read and understand the problem.	You travel at 42 mph for 4 hours. How far will you travel?
Step 2 Work out what calculations you need to do.	42 miles is travelled every hour. So 4 lots of 42 will give the distance travelled.
Step 3 Carry out the calculations and answer the problem.	You might find it easier to do the multiplication if you partition 42 into 40 and 2: $40 \times 4 = 160$ $4 \times 2 = 8$ So $42 \times 4 = 168$. Distance travelled will be 168 miles.
Step 4 Check your answer works.	Try a different method for the multiplication. Multiply by 4 by multiplying by 2 twice: $42 \times 2 = 84$ $84 \times 2 = 168$ The answer is correct.

2.

Step 1 Read and understand the problem.	A distance is given as 72 km. One km is a bit more than half a mile. What would be a good estimate for an equivalent in miles?
Step 2 Work out what calculations you need to do.	Estimating is always an excellent idea. 72 km is about 70 km. Every km is about half a mile so you need to work out 70 lots of half a mile. 70 lots of a half is the same as half of 70, or 70 divided by 2.
Step 3 Carry out the calculations and answer the problem.	$70 \div 2 = 35$ A good estimate would be 35 miles.
Step 4 Check your answer works.	Check by multiplication: $35 \times 2 = 70$, which is close to 72. The answer is correct.