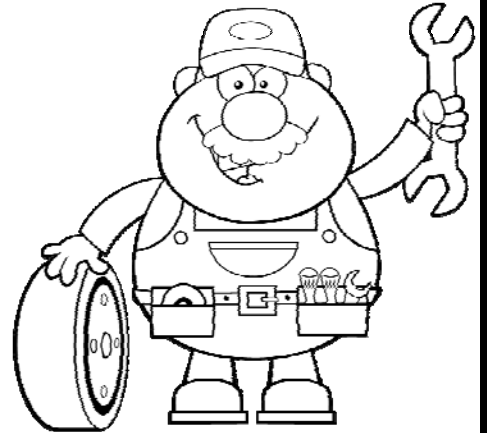


## Auto Mechanic Word Problems – Advanced Lesson

Earl charges \$50 dollars per hour to repair cars. Earl works on a 2012 Nissan Sentra that has inoperable fuel filter and a water pump issue. Earl begins to work on the car at 11:15 am and completes all the repairs by 3:45 pm. How much will Earl charge for the repair?



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Solution:

In this case we need to find the time difference first and then multiply that by the cost of the repairs.

1) Time Difference between 3:45 pm - 11:15 am

Convert to military time (Add 12 to all "pm" times): 15:45 (3:45 + 12) – 11:15

$$\begin{array}{r} 15:45 \\ - 11:15 \\ \hline 4:30 \text{ or } 4.5 \text{ hours (elapsed time)} \end{array}$$

2) Earl charges \$50 per hour. We just need to multiply our elapsed time by \$50.

$$4.5 \text{ hours} \times \$50 \text{ per hour} = \$225$$