Name_____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) Why are the torque and horsepower of an engine equal at 5252 RPM?

_____
_____

2) What math function is needed to calculate the overall gear ratio if the transmission and differential ratios are both known?

_____
_____

3) What service operation may require the technician to add and subtract?

_____
_____

4) What service operation may require the technician to multiply or divide?

_____
_____

5) What is the formula for determining fuel economy?

_____
_____

1) Torque and horsepower are the same at 5,252 RPM because the formula for the relationship between the two has the number 5,252 as a constant. Horsepower is torque multiplied by engine speed (RPM) divided by 5,252.
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2) The math function needed to calculate overall gear ratio is multiplication.
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3) A typical service operation that requires the technician to add or subtract is when determining the correct shim to use adjusting valves.
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4) A technician may use multiplication and division to verify fuel economy, calculate pay, or determine current flow in a circuit if an accessory is added.
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5) Divide the miles traveled by the number of gallons used to get miles per gallon.
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