

## Warmup / Review

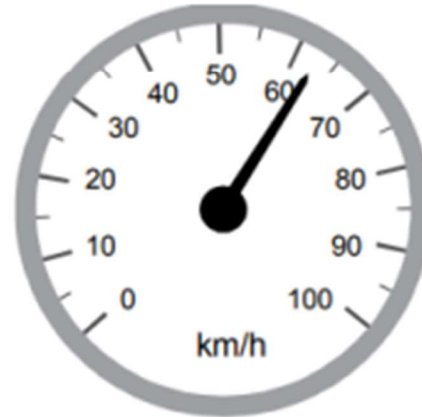
JAN 2016

1. Refer to the diagram of a speedometer.

A) State the precision of the speedometer.

B) State the uncertainty of the speedometer

ANS: A) 5 km/h B)  $\pm 2.5$  km/h



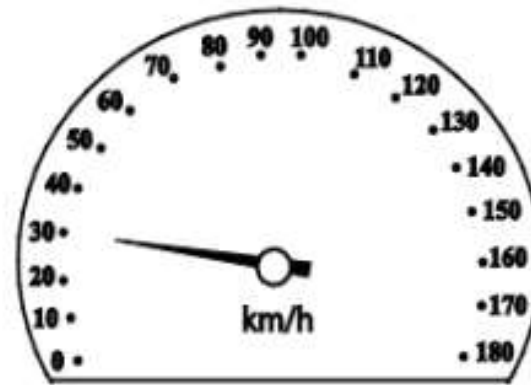
3. Jill buys a roll of wallpaper. She uses a measuring device with a precision of 1 cm to measure and cut a 95 cm piece.

A) State the maximum length of the cut piece of wallpaper.

B) State the minimum length of the cut piece of wallpaper.

ANS: Max 95.5 cm, Min 94.5 cm

8. The speed limit in a school zone is 30 km/h. Evan's speedometer reads 30 km/h. Explain why Evan may be pulled over for exceeding the speed limit using one of the following concepts: accuracy, tolerance, uncertainty, or precision.



Ans: – Evan's speedometer could be inaccurate. – The speedometer's reading has an uncertainty of 5 km/hr. – The officer's radar instrument may not be calibrated accurately. – The officer's radar instrument may have a very low tolerance for speeding (e.g.,  $30\text{km/hr} \begin{matrix} +4 \text{ km/hr} \\ -0 \text{ km/hr} \end{matrix}$ )

Jan 2013

1. List two (2) types of additional or one-time costs to consider when initially purchasing a home. Do not include the down payment or mortgage payment. Explain these costs.

### Various answers

utility service charges, interest adjustment, property tax adjustment, homeowner insurance adjustment, land transfer tax, moving, decorating, appliances, immediate repairs, furniture, property survey, home inspection fee, lawyer/legal fees, appraisal fee, mortgage insurance

2. Jared is moving away from home and must decide where to live. There are various benefits to owning a house or renting a property. State two (2) benefits of owning a house and two (2) benefits of renting a property. You may choose from the following list:

- equity
- no maintenance costs
- lower insurance cost
- easier to renovate
- no property taxes
- acts as an investment

Benefits of owning a house	Benefits of renting a property
1.	1.
2.	2.

### Various answers

- equity- easier to renovate- acts as an investment
- no maintenance costs- lower insurance cost- no property tax (??)

5. Juan's property has a total assessed value of \$150 000. The portioned percentage on his property is 45%. [FYI: It is actually 40% presently in Manitoba]

A) Calculate the portioned assessment of the property. (1 Mark)

B) The municipal tax rate is 12.5 mills. The amount of school division tax due is \$1 451.25. The provincial tax credit this year is \$775. Calculate Juan's total property tax bill for this year. (3 Marks)

The *Statement and Demand for Taxes* below is provided for rough work only. All calculations and answers must appear here:

9. A company wishes to advertise a new type of breakfast cereal by sending out small samples through the mail to potential customers. There is a 7% chance that a potential customer will like the cereal and buy a full box for \$6.00.

A) Calculate the expected value for the company if the samples cost \$0.40 each to produce and distribute. (3 marks)

B) Justify whether the company should try this form of advertising based on your answer in Part A (1 Mark)