## GRADE 11 ESSENTIAL QUIZ PRACTICE WEEK 4



## **Standard instructions:**

Round all decimal answers to nearest 0.01 units. SHOW WORK for best mark. A simple numerical answer alone is seldom acceptable. Show units of measure. Use calculator to full effect Use Tables and Formulae that you have been issued.

1. Calculate the Surface Area of the triangular prism at the right.

2. Calculate the Volume of the triangular prism at the right.

3. Calculate the Volume of the pentagonal prism at the right.









5. Calculate the Volume of the right cylinder.



6. 'Sketch' the net of this cylinder and label the dimensions.





7. Kendra borrows \$7,400 from the bank to renovate her kitchen. The bank charges her 12% interest. Kendra pays back the loan monthly over a term of four years.

- a. determine the amount of Kendra's monthly loan payment; and
- b. determine how much total interest Kendra paid for the loan.

8. **Problem Solving**. Julie, Mark, and Ling are standing in a line. Demonstrate how many different ways they can be arranged from left to right in a line.

9. Kyle invests his income tax refund of \$1,750 in a GIC (Guaranteed Investment Certificate) that pays 7.2% Annual Percentage Rate **compounded** weekly for three years. Determine the value of the GIC when he cashes it in.



**Bonus**. Use an app or website on your phone or a computer to calculate Kendra's monthly loan payment above. Sketch a 'screen shot' of the result.

- a. Which app did you use? \_\_\_\_
- b. Monthly payment from App or website: \_\_\_\_\_

c. Explain why might it be slightly different than what we calculate with our tables?

## BONUS.

The surface area of this **cube** at right is 144 square feet. What is the length of each edge?

