



LA IMMACULADA CONCEPCION SCHOOL

JUNIOR HIGH SCHOOL
GRADE 10 – MATHEMATICS

March 30 - April 3, 2020

Directions: All answers must be written on one whole sheet of paper with solution. Copy and answer.

March 30, 2020

Directions: Review your lessons about sequence and series. Answer the following problems.

1. Write the next 4 terms of the sequence and find a rule for the nth term of the sequence.
 - a. $d = -3, A_2 = 18$
 - b. $r = 2, A_1 = 2$
2. Write the first 3 terms of the arithmetic sequence $A_n = -4 + 4n$.
3. Write the first 3 terms of the geometric sequence $A_n = 8(3)^{n-1}$.

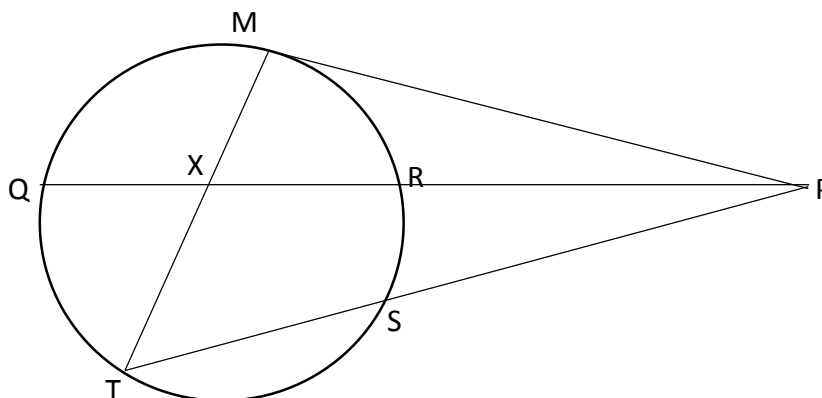
March 31 – April 1, 2020

Directions: Review your lessons about polynomials, then answer the following problems.

1. Find the quotient when $P(x)$ is divided by $D(x)$ using long division or synthetic division. Write your answer in the form $P(x) = Q(x) \cdot D(x) + R(x)$
 - a. $P(x) = 2x^6 - 7x^5 + 9x^4 - 7x^3 + 3x + 3$ and $D(x) = x - 2$
 - b. $P(x) = x^4 + 3x^3 - 5x^2 - 14x + 3$ and $D(x) = x^2 + x - 3$
2. Use synthetic division to determine the integral zeros of each polynomial.
 - a. $x^3 + 3x^2 - 4x - 12$
 - b. $x^3 - 3x^2 - 13x + 15$

April 2 - 3, 2020

Directions: Review your lessons about circles. Use the given figure to answer the following questions below.



1. If $PS = 8$ and $ST = 10$, find PM .
2. If $PS = 4$, $PR = 5$, and $QR = 11$, find PT .
3. If $\text{arc } QT = 80^\circ$ and $\text{arc } RS = 20^\circ$, then what is $m\angle QPT$?
4. If $\text{arc } RS = 22^\circ$, $\text{arc } RM = 58^\circ$, and $\text{arc } QT = 86^\circ$, what is $m\angle QXT$?
5. If $m\angle QXT = 150^\circ$, find $m\angle MXR$.

References: Practical Math by Mario C. Oli and Helma Y. Mesa
Math Notebook