



وزارة التربية والتعليم  
الإدارة المركزية لتطوير المناهج  
مكتب مستشار الرياضيات

برعاية معالي وزير التربية والتعليم

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ونوجيهات مساعد الوزير لشئون تطوير المناهج التعليمية  
والمشرف علي الإدارة المركزية لتطوير المناهج

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أداءات ونقييمات لمنهج الرياضيات

للفص الثالث الاعدادي  
للعام الدراسي 2024 / 2025  
إعداد

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**الصف الثالث الإعدادي - أداء صفى - الأسبوع الرابع**

**Algebra (Solving a quadratic equation in one unknown algebraically using the general formula)**

**Geometry (Continuing The relationship of the chords of the circle to its center)**

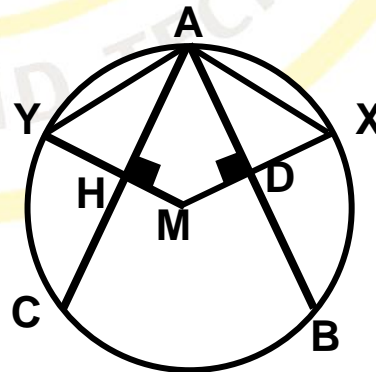
- 1) Find the solution set of the following equation using the general formula:  $x^2 - 2x - 4 = 0$  (rounding the result to two decimal places)
- 2) Find the solution set of the following equation using the general formula:  $x(x - 1) = 4$  (rounding the result to three decimal places)
- 3) Find the solution set of the following equation using the general formula:  $3x^2 + 1 = 6x$  (rounding the result to one decimal place)
- 4) If the solution set of the equation  $x^2 - kx + 4 = 0$  is  $\{-2\}$ , then find the value of  $k$ .
- 5) Find the solution set of the following equation using the general formula:  $x + \frac{4}{x} = 6$  (rounding the result to three decimal places)

6) In the following figure,  $AB = AC$ ,

$\overline{MD} \perp \overline{AB}$ ,  $\overline{MH} \perp \overline{AC}$ , prove that:

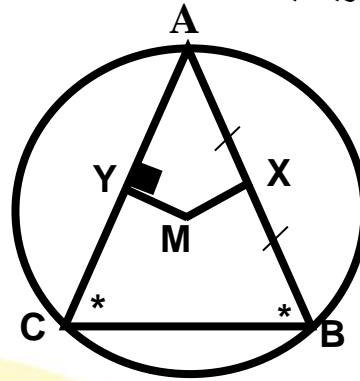
(1)  $DX = HY$

(2)  $m(\angle XAB) = m(\angle YAC)$



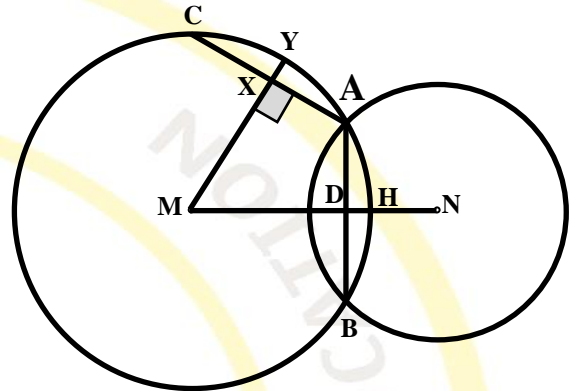
7) In the following figure:

$ABC$  is a triangle inscribed in a circle  $M$ ,  
 $m(\angle B) = m(\angle C)$ ,  $X$  is the midpoint of  $\overline{AB}$ ,  
 $\overline{MY} \perp \overline{AC}$ , prove that  $MX = MY$



8) In the following figure:

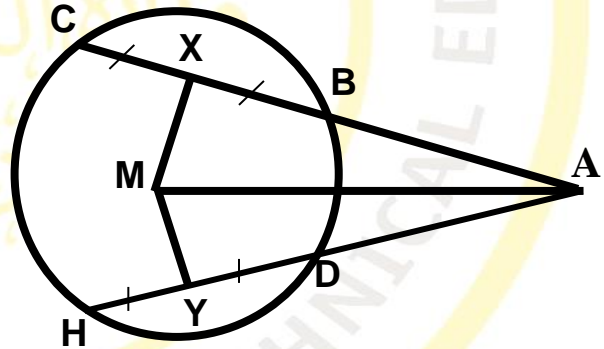
$M$  and  $N$  are two intersecting circles  
at  $A$  and  $B$ , draw  $\overline{MX} \perp \overline{AC}$  to intersect  
the circle  $M$  at  $Y$ , and  $\overline{MN}$  intersects  $\overline{AB}$   
at  $D$  and the circle  $N$  at  $H$ ,  $AC = AB$  Prove that  $XY = DH$



9) In the following figure:

$BC = DH$ ,  $X$  is the midpoint of  $\overline{BC}$ ,  
and  $Y$  is the midpoint of  $\overline{DH}$ ,

Prove that  $AB = AD$



10) In the following figure:

$M$  and  $N$  are two intersecting circles  
at  $A$  and  $B$ ,  $O$  is the midpoint of  $\overline{DC}$ ,  
 $Z$  is the midpoint of  $\overline{XY}$ ,  $MO = ML$ ,  $NL = NZ$ ,  
prove that  $CD = XY$ .

