وزارة التربية والتعليم و التعليم الفنى
الادارة المركزية للتعليم العام
إدارة تنمية مادة الرياضيات

برعاية معالي وزير التربية والتعليم و التعليم العام

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أداءات وتقييمات لمنهج الرياضيات

للصف الأول الثانوي لغات

الفصل الدراسى الثانى

للعام الدراسي 2025 / 2026

الأسبوع التاسع

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(9) الرياضيات لغات للصف الأول الثانوي الأداء الصفى الأسبوع التاسع (9)

First: Algebra:

1) By using determinants find the solution set of the following equations:
$2x + y - 2z = 10$, $3x + 2y + 2z = 1$, $5x + 4y + 3z = 4$.

2) Find the values of x which makes the matrix $\begin{pmatrix} x & 9 \\ 4 & x \end{pmatrix}$ has no multiplicative inverse.

3) Find the multiplicative inverse of the matrix $\begin{pmatrix} 4 & 6 \\ 2 & 2 \end{pmatrix}$.

4) Using matrices, find the solution set of the following systems of equations

Second: Trignometry:

5) A kite has a string of length 42 meters. If the angle made by the string with the horizontal ground is equal to 63°, find, to the nearest meter, the height of the kite above the ground.

6) A ladder rests by one end on a vertical wall and is 3.8 meters above the ground. The lower end of the ladder is on the ground, the measure the angle of inclination of the ladder to the ground is 64° find to the nearest two decimal places, the length of the ladder.

7) From the roof of an 8-meter-high house, a person measured the angle of elevation of the top of a building in front of him and found its measure is 63°, He also measured the angle of depression of its base and found its measure is 28°. Find the height of the building to the nearest meter.

Third: Geometry:

8) Find the measure of the angle between the two lines whose slopes are 2 , $\frac{-1}{2}$.

9) Find the measure of the acute angle between the two lines:
$\vec{r} = (0,1) + k(1,1)$, $2x - y - 3 = 0$.

10) Find the measure of the acute angle between the two lines.
$\sqrt{3}x - y = 4$, $y = 3$.

(9) الرياضيات لغات (9) للصف الأول الثانوي الأداء المنزلى الأسبوع التاسع

First: Algebra:

1) By using determinants find the solution set of the following equations:
$x + y + z = 2$, $2x - y + 3z = -3$, $3x + 2y - z = 7$.

2) Find the values of x which makes the matrix $\begin{pmatrix} x & 9 \\ 25 & x \end{pmatrix}$ has no multiplicative inverse.

3) Find the multiplicative inverse of the matrix $\begin{pmatrix} 3 & 5 \\ 1 & 2 \end{pmatrix}$.

4) Using matrices, find the solution set of the following systems of equations
$2x + y = 7$, $x - y = -1$.

Second: Trignometry:

5) A kite has a string of length 50 meters. If the angle made by the string with the horizontal ground is equal to 55°, find, to the nearest meter, the height of the kite above the ground.

6) A ladder rests by one end on a vertical wall and is 4.5 meters above the ground. The lower end of the ladder is on the ground, the measure the angle of inclination of the ladder to the ground is 70° find to the nearest two decimal places, the length of the ladder.

7) From the roof of a 10-meter-high house, a person measured the angle of elevation of the top of a building in front of him and found its measure is 50°, He also measured the angle of depression of its base and found its measure is 30°. Find the height of the building to the nearest meter.

Third: Geometry:

8) Find the measure of the angle between the two lines whose slopes are $3, \frac{-1}{3}$.

9) Find the measure of the acute angle between the two lines:
$\vec{r} = (1, 2) + k(3, -1)$, $2x - y + 1 = 0$.

10) Find the measure of the acute angle between the two lines.
$x - \sqrt{3}y = 4$, $y = 1$.

(9) الرياضيات لغات للصف الأول الثانوي التقييمات الأسبوعية الأسبوع التاسع (9)

First Group:

1) Find the values of x which makes the matrix $\begin{pmatrix} x & 8 \\ 4 & 2 \end{pmatrix}$ has no multiplicative inverse.

2) Find the multiplicative inverse of the matrix $\begin{pmatrix} 4 & 7 \\ 1 & 2 \end{pmatrix}$.

3) A lamppost of length 6 m and its shadow of length 3 m on the ground. Find the angle of elevation of the sun at that instant.

4) A kite has a string of length 40 meters. If the angle made by the string with the horizontal ground is equal to 50^o, find to the nearest meter the height of the kite above the ground.

5) Find the measure of the acute angle between the two lines. $x - y = 5$, $y = 2$

Second: Group:

1) Find the values of x which makes the matrix $\begin{pmatrix} x & 2 \\ 6 & 3 \end{pmatrix}$ has no multiplicative inverse.

2) Find the multiplicative inverse of the matrix $\begin{pmatrix} 3 & 1 \\ 5 & 2 \end{pmatrix}$.

3) A lamppost of length 12 m and its shadow of length 9 m on the ground. Find the angle of elevation of the sun at that instant.

4) A kite has a string of length 55 meters. If the angle made by the string with the horizontal ground is equal to 40^o, find, to the nearest meter, the height of the kite above the ground.

5) Find the measure of the acute angle between the two lines:
$x + y = 6$, $y = 4$

Third: Group:

1) Find the values of x which makes the matrix $\begin{pmatrix} 4 & 8 \\ 2 & x \end{pmatrix}$ has no multiplicative inverse.
2) Find the multiplicative inverse of the matrix $\begin{pmatrix} 3 & 4 \\ 2 & 3 \end{pmatrix}$.
3) A lamppost of length 25 m and its shadow of length 15 m on the ground. Find the angle of elevation of the sun at that instant.
4) A kite has a string of length 70 meters. If the angle made by the string with the horizontal ground is equal to 30^o, find, to the nearest meter, the height of the kite above the ground.
5) Find the measure of the acute angle between the two lines. $x - y = 12$, $y = 1$