

تم تحميل هذا الملف من موقع المناهج الإماراتية



الملف أسئلة نموذج تدريبي ريفيل

[موقع المناهج](#) ← [المناهج الإماراتية](#) ← [الصف التاسع المتقدم](#) ← [رياضيات](#) ← [الفصل الثالث](#)

روابط مواقع التواصل الاجتماعي بحسب الصف التاسع المتقدم



روابط مواد الصف التاسع المتقدم على تلغرام

[الرياضيات](#)

[اللغة الانجليزية](#)

[اللغة العربية](#)

[التربية الاسلامية](#)

المزيد من الملفات بحسب الصف التاسع المتقدم والمادة رياضيات في الفصل الثالث

| | |
|---|---|
| أسئلة الاختبار التحريبي ريفيل | 1 |
| حل تجميعة أسئلة وفق الهيكل الوزاري الحديد ريفيل | 2 |
| مراجعة نهاية الفصل وفق الهيكل الوزاري ريفيل | 3 |
| حل تجميعة أسئلة وفق الهيكل الوزاري ريفيل | 4 |
| تجميعة أسئلة وفق الهيكل الوزاري الحديد | 5 |

مدرسة سيف اليعربي الحلقة الثالثة بنين

تعليم

مؤسسة الإمارات للتعليم المدرسي
EMIRATES SCHOOLS ESTABLISHMENT

نموذج تدريبي رياضيات

Mathematics Mock exam

9 A REVEL TERM 3

الصف:

أ. / محمد قاسم

الهيكل هو المرجع الأساسي وهذا النموذج بغرض التدريب

alManahj.com/ae

Find the next term in the sequence.

(1) 1, 4, 8, 12, 16, 20

a. 24

b. 22

c. 25

d. 30

(2) $1, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}$

a. $\frac{1}{16}$

b. 16

c. $\frac{1}{10}$

d. 10

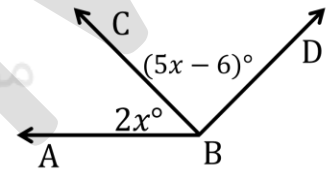
(3) Find $m\angle ABC$ if $m\angle ABD = 120^\circ$

a. 18

b. 36

c. 84

d. 120



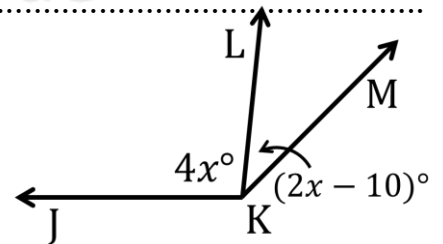
(4) Find $m\angle LKM$ if $m\angle JKM = 140^\circ$

a. 40

b. 100

c. 25

d. 140



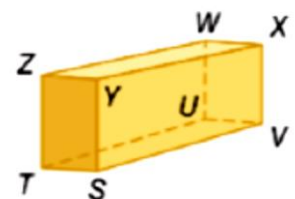
(5) Refer to the figure to identify a segment skew to ZY

a. \overline{WU}

b. WX

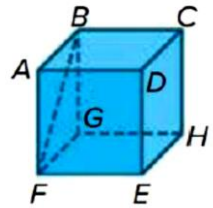
c. \overline{UV}

d. \overline{TZ}



(6) Refer to the figure to identify a segment line parallel to \overleftrightarrow{EH}

- a. \overleftrightarrow{CD} b. \overleftrightarrow{CH} c. \overleftrightarrow{ED} d. \overleftrightarrow{BG}



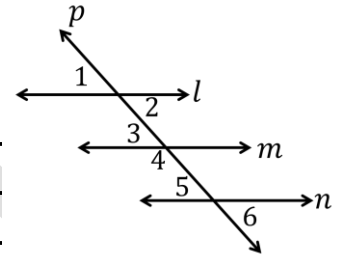
.....

.....

.....

(7) Determine which lines, if any, are parallel. so that $m\angle 1 \cong m\angle 5$

- a. p, l b. n, m c. m, l d. n, l



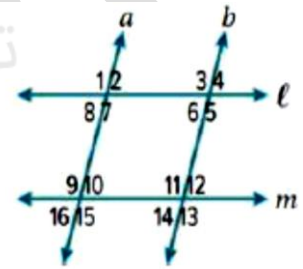
.....

.....

.....

(8) Determine which lines, if any, are parallel. so that $\angle 9 \cong \angle 11$

- a. L, m b. a, b c. L, b d. m, a



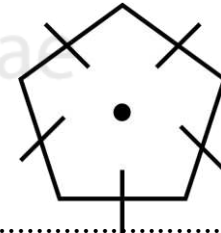
.....

.....

.....

(9) Determine Order and Magnitude of Symmetry

- a. order = 5 magnitude = 72°
 b. order = 2 magnitude = 180°
 c. order = none magnitude = none

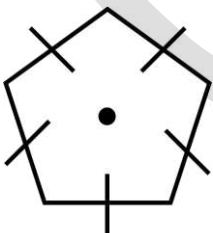

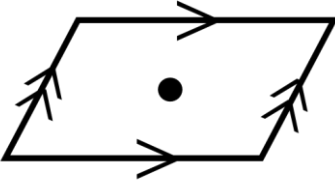
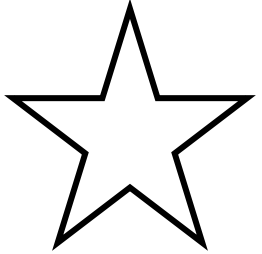


.....

.....

.....

(10) Which figure has point symmetry?

- a.  b.  c.  d. 

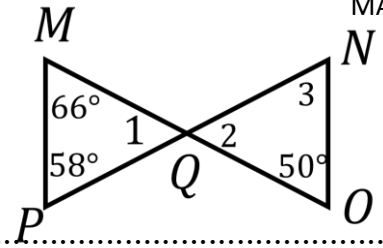
.....

.....

.....

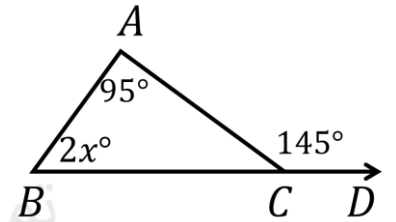
(11) Find $m\angle 3$

- a. 74
- b. 56
- c. 50
- d. 66



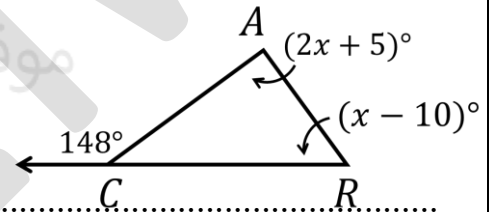
(12) $m\angle ABC$

- a. 50
- b. 25
- c. 30
- d. 95



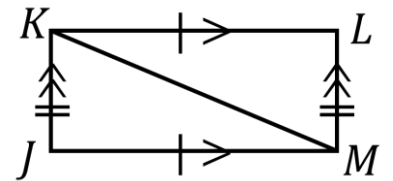
(13) Find the value of x

- a. $x = 5$
- b. $x = 51$
- c. $x = 148$
- d. $x = 180$



(14) Write a congruence statement.

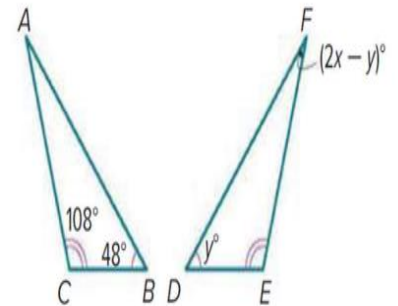
- a. $\Delta JKM \cong \Delta LMK$
- b. $\Delta JMK \cong \Delta MLK$
- c. $\Delta JMK \cong \Delta KML$



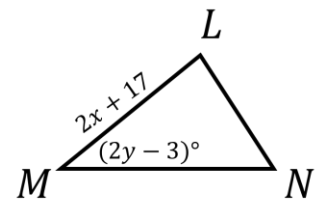
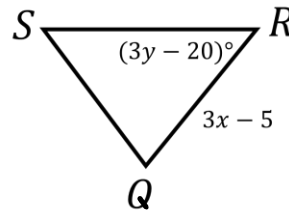
(15) In the diagram, $\Delta ABC \cong \Delta FDE$

Find the value of x and y

- a. $x = 36$ $y = 48$
- b. $x = 48$ $y = 36$
- c. $x = 108$ $y = 48$
- d. $x = 72$ $y = 96$



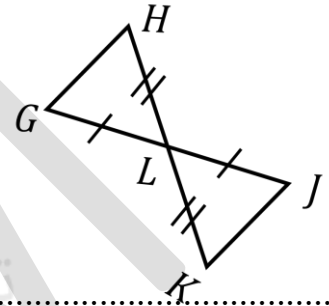
(16) In the diagram, $\triangle LMN \cong \triangle QRS$. find x, y .



- a. $x = 17, y = 37$
- b. $x = 22, y = 17$
- c. $x = 77, y = 22$

(17) In the diagram $HL \cong LK, LJ \cong LG$

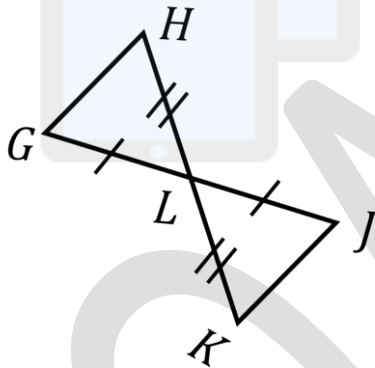
Determine which postulate can be used to prove that the triangles are congruent according to the information given.



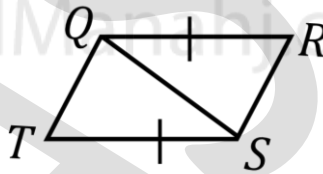
- a. SAS
- b. SSS
- c. AAS
- d. ASA

(18) Which of the triangles are congruent

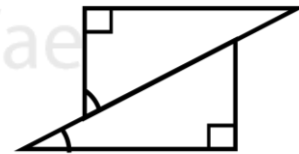
a.



b.



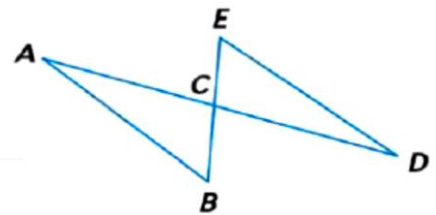
c.



(19) Given: C is the midpoint of both \overline{BE} and \overline{AD} .

Name a pair of congruent triangles.

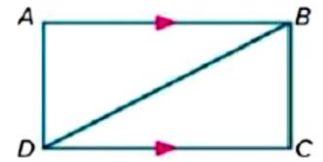
- a. $\triangle ABC \cong \triangle CDE$
- b. $\triangle ABC \cong \triangle DEC$
- c. $\triangle ABC \cong \triangle ECD$
- d. $\triangle ABC \cong \triangle EDC$



(20) In the diagram

Determine which postulate can be used to prove that the triangles are congruent according to the information given.

Given: $\overline{AB} \parallel \overline{CD}$, $\angle CBD \cong \angle ADB$



- a. SAS b. SSS c. AAS d. ASA

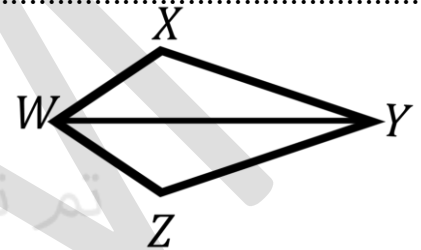
.....

.....

.....

(21) Given: \overline{WY} bisects $\angle XWZ$ and $\angle XYZ$

Determine which postulate can be used to prove that the triangles are congruent.



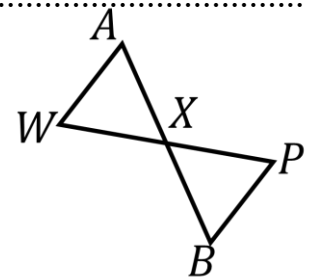
- a. SAS b. SSS c. AAS d. ASA

.....

.....

.....

(22) Given: \overline{WP} and \overline{AB} , bisect each other, Which postulate can be used to prove that the triangles are congruent?



- a. SAS b. SSS c. AAS d. ASA

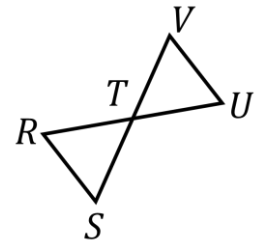
.....

.....

.....

(23) Given: $\angle S \cong \angle V$, and T is the midpoint of \overline{SV} .

What additional information could be used to prove that $\triangle RTS \cong \triangle UTV$



- a. $\angle S \cong \angle V$ b. $\overline{ST} \cong \overline{TV}$ c. $\angle RTS \cong \angle VTU$

.....

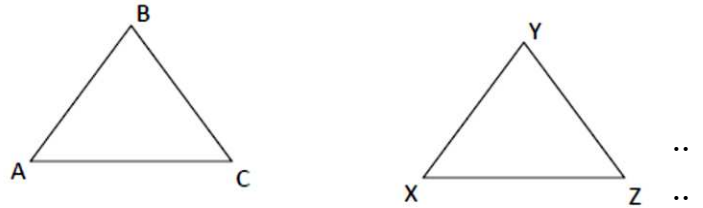
.....

.....

(24) In the diagram, $\angle C \cong \angle Z$ and $\overline{AC} \cong \overline{XZ}$.

What additional information could be used to prove that $\triangle ABC \cong \triangle XYZ$?

- a. $\angle X \cong \angle A$
- b. $\overline{BC} \cong \overline{XY}$
- c. $\overline{AB} \cong \overline{YZ}$
- d. $\angle Y \cong \angle A$

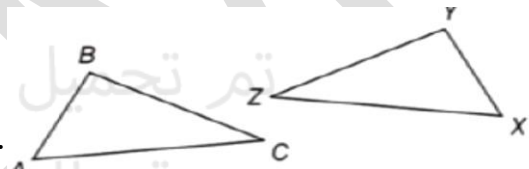


.....

(25) In the diagram, $\angle A \cong \angle X$ and $\angle B \cong \angle Y$

What additional information could be used to prove that $\triangle ABC \cong \triangle XYZ$?

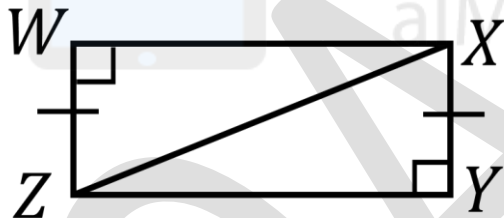
- a. $\angle X \cong \angle C$
- b. $\overline{AB} \cong \overline{XY}$
- c. $\overline{AB} \cong \overline{YZ}$
- d. $\angle Y \cong \angle A$



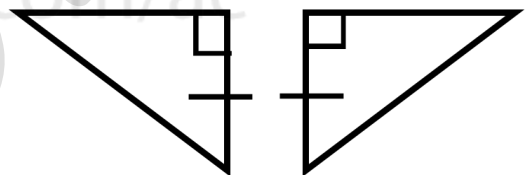
.....

(26) Determine pair of triangles is congruent.

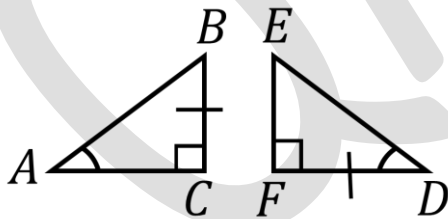
a.



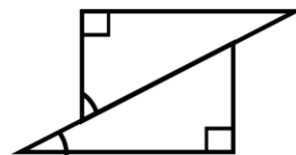
c.



b.



d.



.....

(27) Given: Q is the midpoint of \overline{RS} , $\overline{PS} \cong \overline{PR}$

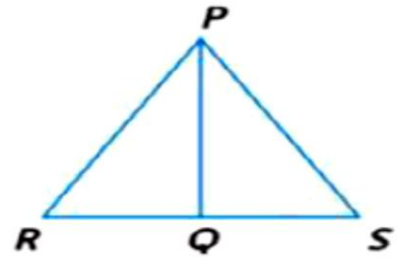
Name a pair of congruent triangles.

a. $\triangle RQP \cong \triangle SQP$

b. $\triangle RQP \cong \triangle SPQ$

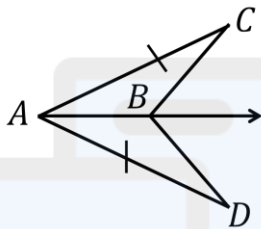
c. $\triangle RQP \cong \triangle QPS$

d. $\triangle RQP \cong \triangle PQS$

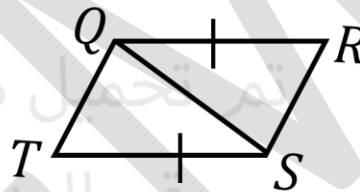


(28) Which pair of triangles have enough information given to prove that the triangles are congruent using *SSS* or *SAS*.

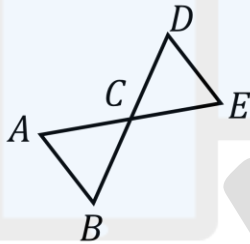
a.



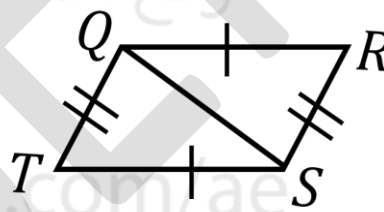
c.



b.



d.



(29) Use the following statements to write a compound statement for

$q \vee \sim p$

q: A week has seven days.

p : There are 20 hours in a day.

- a. A week has seven days, or there are 20 hours in a day.
- b. A week has seven days, and there are 20 hours in a day.
- c. A week has seven days, or there aren't 20 hours in a day.
- d. A week hasn't seven days, and there are 20 hours in a day.

(30) Use the following statements

$p: -3 - 2 = -5.$

$q:$ Vertical angles are congruent.

$r: 2 + 8 > 10$ WHICH OF THE THESE COMPOUND STATEMENTS IS FALSE

a.) p and q

b.) $p \wedge r.$

c.) $q \vee \sim r$

d.) $\sim r \vee \sim p$

.....

.....

.....

(31) Determine which statement follows logically from the given statements.

(1) If you do not get enough sleep, then you will be tired.

(2) If you are tired, then you will not do well on the test.

a. If you do not do well on the test, then you did not get enough sleep.

b. There is no valid conclusion.

c. If you are tired, then you will not get enough sleep.

d. If you do not get enough sleep, then you will not do will on the test.

.....

.....

.....

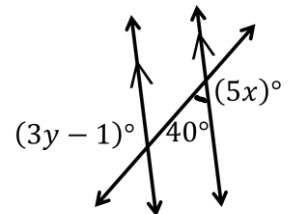
(32) Find the value of x and y

a. $x = 28, y = 47$

b. $x = 47, y = 40$

c. $x = 47, y = 28$

d. $x = 40, y = 8$



.....

.....

.....

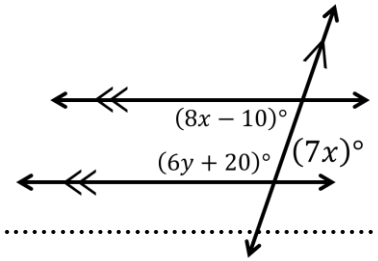
(33) Find the value of x and y

a. $x = 10, y = 15$

b. $x = 20, y = 30$

c. $x = 15, y = 10$

d. $x = 24, y = 12$



(34) Write an equation in slope-intercept form for each line described.

passes through $(-7, -4)$, perpendicular to $y = \frac{1}{2}x + 9$

a. $y = -2x - 18$

b. $y = 2x + 18$

c. $y = \frac{1}{2}x + 10$

d. $y = -\frac{1}{2}x + 10$

(35) Write an equation in slope-intercept form for each line described.

passes through $(6, 2)$, parallel to $y = -\frac{2}{3}x + 1$

a. $y = -\frac{2}{3}x + 6$

b. $y = \frac{3}{2}x + 6$

c. $y = -\frac{3}{2}x + 2$

d. $y = \frac{3}{2}x + 2$

(36) Determine which of the following coordinates would make \overline{AB} and \overline{CD} are perpendicular.

a. $A(8,2), B(4,1), C(3,11), D(2,9)$

b. $A(4,2), B(3,1), C(6,0), D(10,8)$

c. $A(1,4), B(5,5), C(9,-10), D(-6,-5)$

d. $A(8,-2), B(4,-1), C(3,11), D(-2,-9)$

(37) Find the distance between the two parallel lines with the given equations.

$$x = -5 \quad , \quad x = 4$$

a. 8

b. 9

c. 5

d. 1

(38) Find the distance between the two parallel lines with the given equations.

$$y = 7 \quad , \quad y = -1$$

a. 8

b. 9

c. 5

d. 1

(39) Find the distance between each pair of parallel lines with the given equations.

$$y = 3x \quad , \quad y = 3x + 10$$

hint $d = \frac{|c_2 - c_1|}{\sqrt{1+m^2}}$

a. $\sqrt{10}$ b. $\sqrt{7}$ c. $\sqrt{3}$

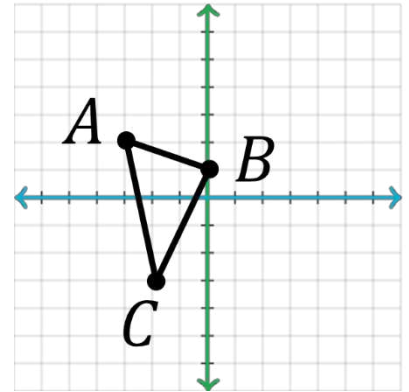
(40) The image of $F(-3, 1)$, under a translation vector. $\langle 5, -1 \rangle$

a. $F'(2, 0)$ b. $F'(0, 2)$ c. $F'(8, 2)$ d. $F'(0, -2)$

(41) The image of $A(-3, -5)$ under a translation is $A'(6, -1)$. Find the image of $B(3, -2)$ under the same translation.

a. $B'(12, 2)$ b. $B'(-12, -2)$ c. $B'(2, -12)$ d. $B'(6, -1)$

(42) If the triangle ABC is reflected across the line $y = x$ to become $A'B'C'$ what are the coordinate of A'

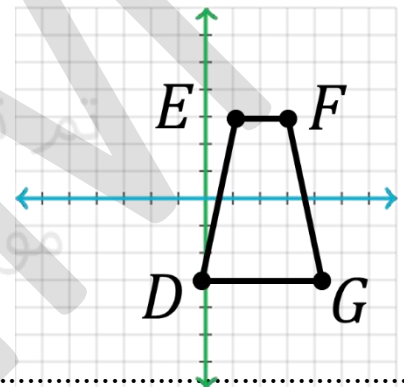


- a. $A'(2, -3)$ b. $A'(-3, 2)$
- c. $A'(-3, -2)$ d. $A'(-3, 2)$

(43) If the trapezoid EDGF is reflected

across the line $x = -1$ to become $E'D'G'F'$

what are the coordinate of D'



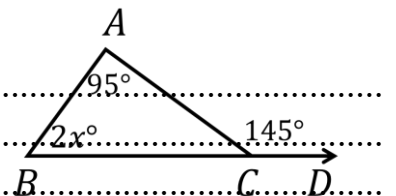
- a. $D'(-2, -3)$ b. $D'(-3, 2)$
- c. $D'(-3, -2)$ d. $D'(-3, 2)$

(44) Determine the coordinates of $S(-7, 1)$ after a reflection in the line $y = 3$.

- a. $S'(-7, 5)$ b. $S'(-3, 5)$ c. $S'(7, -4)$ d. $S'(7, 4)$

(45) $m\angle ABC$

- a. 50 b. 25 c. 30 d. 95



(46) TOWERS A lookout tower sits on a network of struts and posts.

Leslie measured two angles on the tower. If $m\angle 1 = (7x - 7)^\circ$, $m\angle 2 = (4x + 2)^\circ$, and $m\angle 3 = (2x + 6)^\circ$, what is $m\angle 1$?

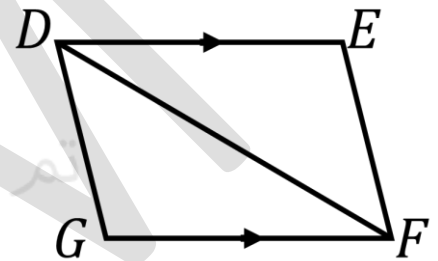


- a. 98 b. 25 c. 30 d. 95

(47) Given: $\overline{DE} \parallel \overline{FG}$, $\angle E \cong \angle G$

Prove: $\triangle DFG \cong \triangle FDE$

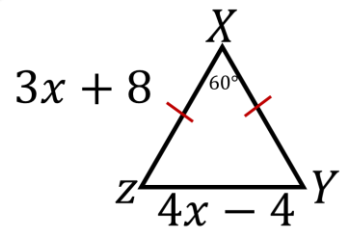
Determine which postulate can be used to prove that the triangles are congruent.



- a. SAS b. SSS c. AAS d. ASA

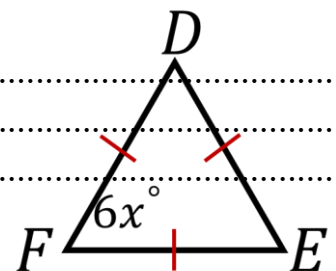
(48) Find the value of x .

- a. 12 b. 25
c. 60 d. 40



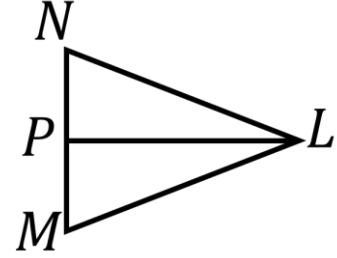
(49) Find the value of x .

- a. 10 b. 12 c. 15 d. 30



PLEASE SHOW YOUR STEPS

(50) Write two- column proof

Given: $NP = PM, \overline{NP} \perp \overline{PL}$ Prove: $\triangle NPL \cong \triangle MPL$ 

| statements | Reason |
|-------------------------------------|--------------|
| | GIVEN |
| | |
| | |
| | |
| | |
| $\triangle NPL \cong \triangle MPL$ | |

(51) Determine whether \overleftrightarrow{AB} and \overleftrightarrow{CD} are parallel, perpendicular, or neither for $A(3, 6), B(-9, 2), C(5, 4),$ and $D(2, 3)$

.....

.....

.....

.....

.....

.....

(51) COMPLETE THE PROOF

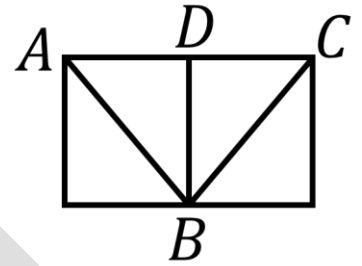
Given: $\overline{AB} \cong \overline{CB}$, D is the midpoint of \overline{AC} , Prove: $\triangle ABC \cong \triangle CBD$

solution:

Given: $\overline{AB} \cong \overline{CB}$, D is the midpoint of \overline{AC} .

Prove: $\triangle ABD \cong \triangle CBD$

Proof:

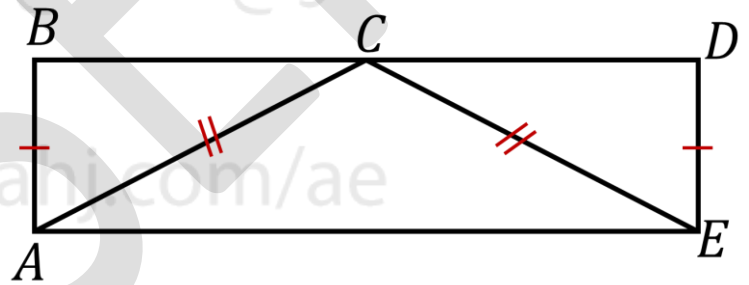


| Statements | Reason |
|-------------------------------------|--------------------------|
| | Given |
| | . Definition of midpoint |
| $\overline{BD} \cong \overline{BD}$ | |
| $\triangle ABD \cong \triangle CBD$ | |

(52) two-column proof

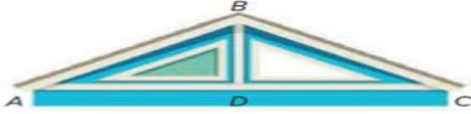
Given: $\overline{AB} \cong \overline{ED}$, $\overline{CA} \cong \overline{CE}$, \overline{AC} bisects \overline{BD}

Prove: $\triangle ABC \cong \triangle EDC$



| Statements | Reason |
|-------------------------------------|----------------------------------|
| | Given |
| | . Definition of segment bisector |
| | Midpoint Theorem |
| $\triangle ABC \cong \triangle EDC$ | |

GAMING Devontae is building a house in a simulation video game. He wants the roof of the house and the main support beam to create congruent triangles. If $\overline{BD} \perp \overline{AC}$ and \overline{BD} bisects \overline{AC} , write a two-column proof to prove $\triangle ABD \cong \triangle CBD$.



SOLUTION:

Given: $\overline{BD} \perp \overline{AC}$, \overline{BD} bisects \overline{AC} .

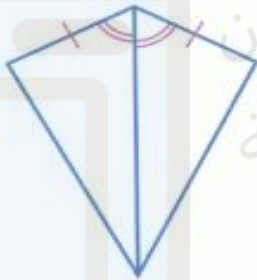
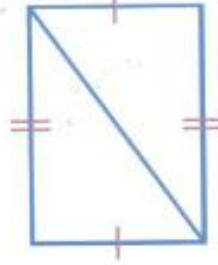
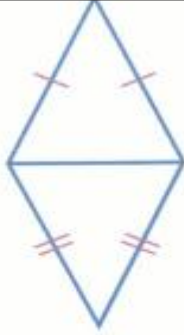
Prove: $\triangle ABD \cong \triangle CBD$

Proof:

| Statements | Reason |
|-------------------------------------|--------|
| | Given |
| | |
| | |
| | |
| $\triangle ABD \cong \triangle CBD$ | |

Determine which postulate can be used to prove that the triangles are congruent. IF NOT WRITE CANNOT BE PROVED.

BONUS



تم تحميل هذا الملف من موقع المناهج الإماراتية
alManahj.com/ae

Q.A.