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

برعاية معالي وزير التربية والتعليم و التعليم العام
السيد الأستاذ/ محمد عبد اللطيف

وتوجيهات رئيس الإدارة المركزية للتعليم العام

د/ هالة عبد السلام خفاجى

إشراف علمي

مستشار الرياضيات

أ/ منال عزقول

أداءات وتقييمات لمنهج الرياضيات

للصف الأول الثانوي لغات

الفصل الدراسى الأول

للعام الدراسي 2025 / 2026

الأسبوع الثانى

لجنة الإعداد

أ/ إيهاب فتحى أ/ عصام الجزار

ترجمة

أ/ محمد على

مراجعة

أ/ شريف البرهامى

الصف الأول الثانوي – الرياضيات لغات - الأداء الصفي -الأسبوع الثاني

1) Find in simplest form the result of each of the following:

(a) $(2+5i)+(4-i)$

(b) $(\sqrt{16}-3i)-(-3+\sqrt{-36})$

(c) $(2-7i)(2-7i)$

2) Find the values of x and y that satisfy the equation:

$$\frac{(4-i)(4+i)}{2-i} = x + yi$$

3) Find it in its simplest form

(a) $\frac{3-6i}{3i}$ (b) $\frac{50}{4-3i}$ (c) $\frac{2-i}{3-i}$

4) Find the expression in its simplest form $(1-i)^{10}+32i^{100}$

5) Put the expression: $(1+2i^2)(1+2i^5+5i^6)$ in the form $x+yi$

6) Determine the quadrant in which each of the angles whose measures lie lies as follows

(a) 240° (b) 124° (c) 267° (d) 50°

7) Determine the negative measure of the angles whose measure is as follows:

(a) 70° (b) 145° (c) 301° (d) 250°

8) Find two angles, one with a positive measure and the other with a negative measure, the terminal side for each of the following angles:

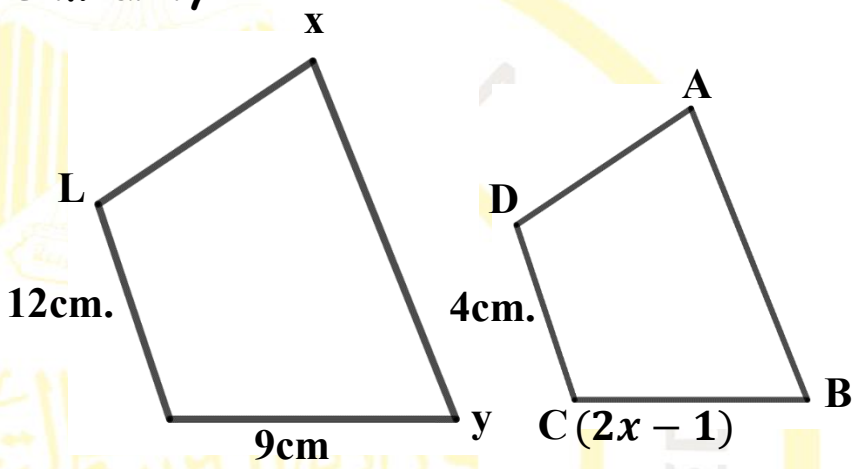
(a) 110° (b) -65° (c) -230° (d) 210°

9) Determine the smallest positive measure for each of the following angles: (a) -35° (b) 565° (c) 940° (d) -480°

10) In the oppsite figure: Polygon ABCD ~ Polygon XYZL

First: Find the numerical value of x

Second: Find factor of Similarity



11) A rectangle with dimensions of 10 cm and 6 cm. Find the dimension of another rectangle similar to it if:

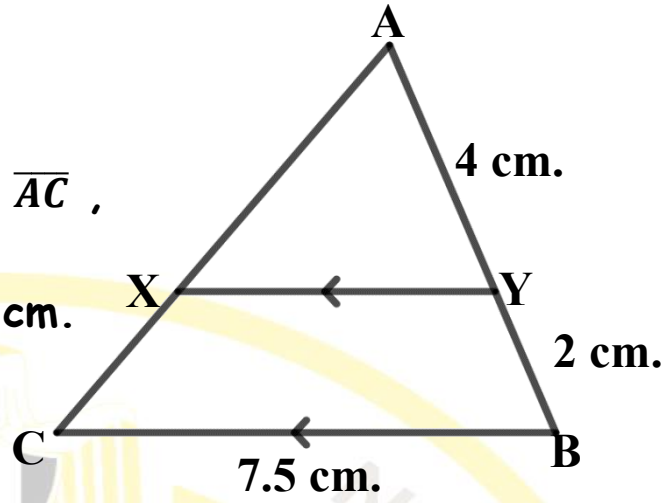
First: factor of Similarity = 3

Second: factor of Similarity = 0.4

12) A polygon with a perimeter of 30 cm. Find the perimeter of another similar polygon if the similarity factor = 2.

13) In the oppsite figure:

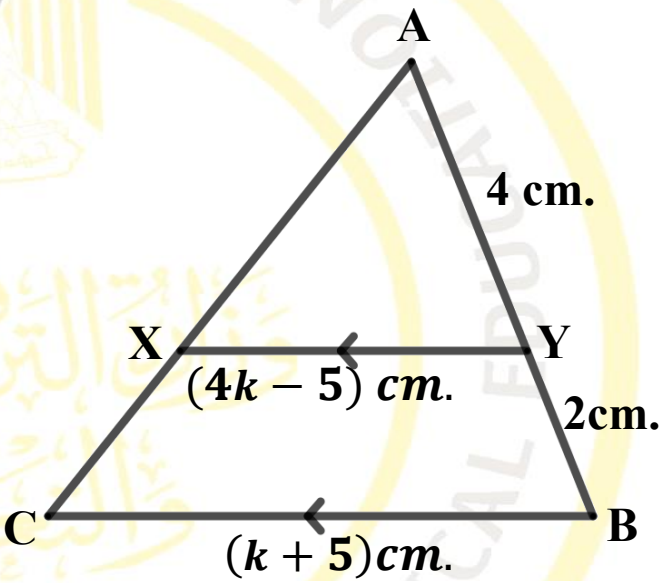
ABC is a triangle, Y ∈ $\overline{AB}$, X ∈ $\overline{AC}$,
where $\overline{XY}$ // $\overline{BC}$,
AY = 4cm. YB = 2cm. BC = 7.5 cm.



First: Prove that ΔABC ~ ΔAYX
Second: Find the length of $\overline{XY}$

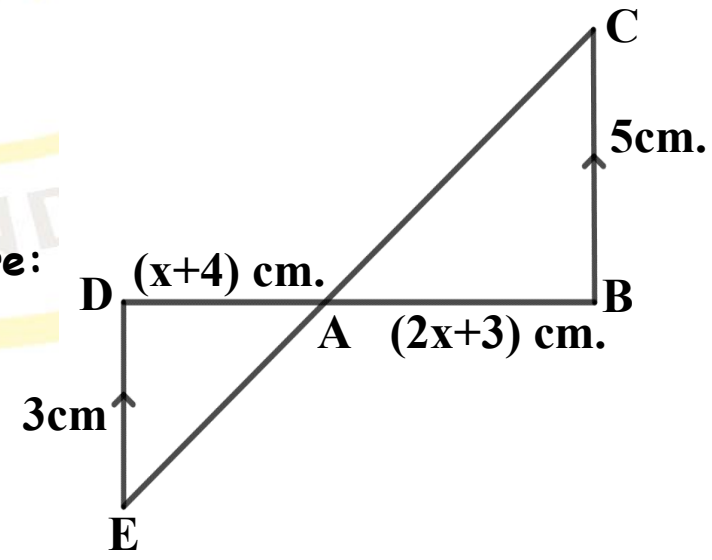
14) In the oppsite figure:

ABC is a triangle, Y ∈ $\overline{AB}$, X ∈ $\overline{AC}$,
where $\overline{XY}$ // $\overline{BC}$
, AY = 4cm. YB = 2cm.
BC = $(k+5)\ cm.$ XY = $(4k-5)\ cm.$



First: Prove that ΔABC ~ ΔAYX
Second: Find the value of k

15) From the data in the opposite figure:
First: Prove that: ΔABC ~ ΔADE
Second: Find the value of x



1) Find in simplest form the result of each of the following:

(d) $(5-7i)+(4+\sqrt{-4})$

(e) $(7-6i)-(\sqrt{4}+5i)$

(f) $(1-2i)(2-5i)$

2) Find the values of x and y that satisfy the equation:

$$\frac{(4-i)(4+i)}{5-3i} = x + yi$$

3) Find it in its simplest form

(b) $\frac{5-10i}{5i}$ (b) $\frac{100}{4-3i}$ (c) $\frac{1-i}{2-i}$

4) Find the expression in its simplest form $(1-i)^{20}$

5) Put the expression: $(1+2i^5)(4+2i^7+4i^{12})$ in the form $x+yi$

6) Determine the quadrant in which each of the angles whose measures lie lies as follows

(a) 40° (b) 135° (c) 350° (d) 290°

7) Determine the negative measure of the angles whose measure is as follows:

(a) 60° (b) 195° (c) 317° (d) 298°

8) Find two angles, one with a positive measure and the other with a negative measure, the terminal side for each of the following angles:

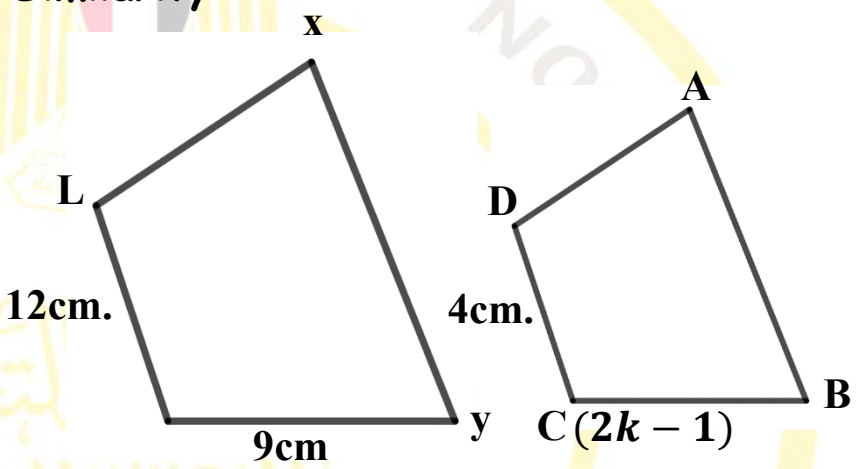
(b) 130° (b) -85° (c) -260° (d) 110°

9) Determine the smallest positive measure for each of the following angles: (a) $-81°$ (b) $665°$ (c) $980°$ (d) $-465°$

10) In the oppsite figure: Polygon ABCD ~ Polygon XYZL

First: Find the numerical value of k

Second: Find factor of Similarity



11) A rectangle with dimensions of 8 cm and 5 cm. Find the dimension of another rectangle similar to it if:

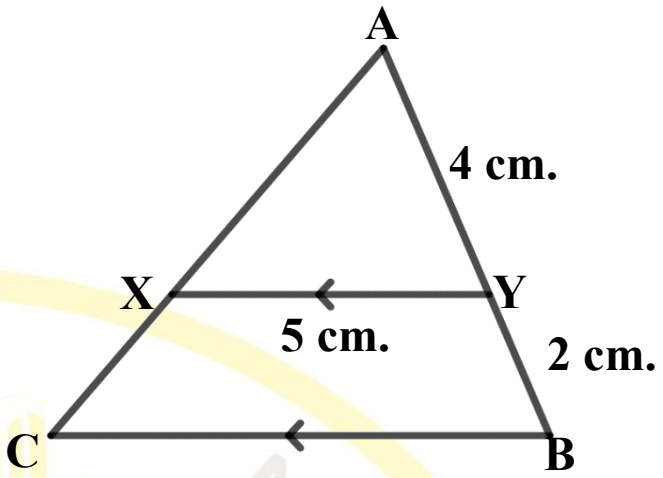
First: factor of Similarity = 3

Second: factor of Similarity = 0.4

12) A polygon with a perimeter of 30 cm. Find the perimeter of another similar polygon if the similarity factor = 0.5

13) In the oppsite figure:

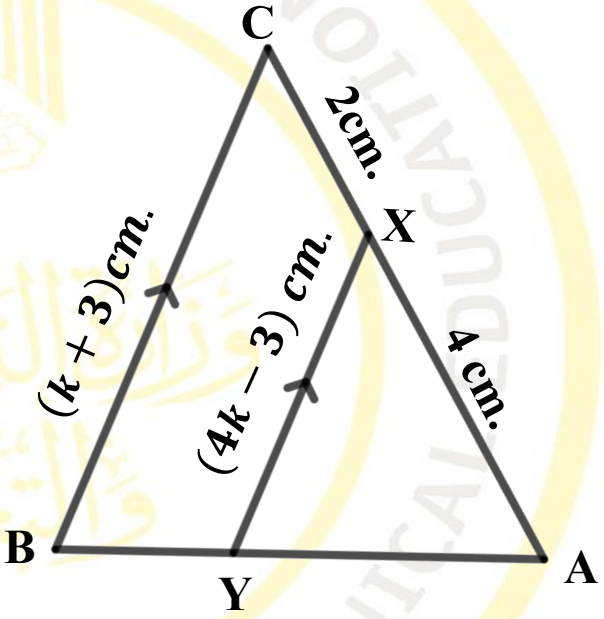
ABC is a triangle, Y ∈ $\overline{AB}$, X ∈ $\overline{AC}$,
where $\overline{XY}$ // $\overline{BC}$
, AY = 4cm. YB = 2cm. XY =5 cm.



First: Prove that ΔABC ~ ΔAYX
Second: Find the length of $\overline{BC}$

14) In the oppsite figure:

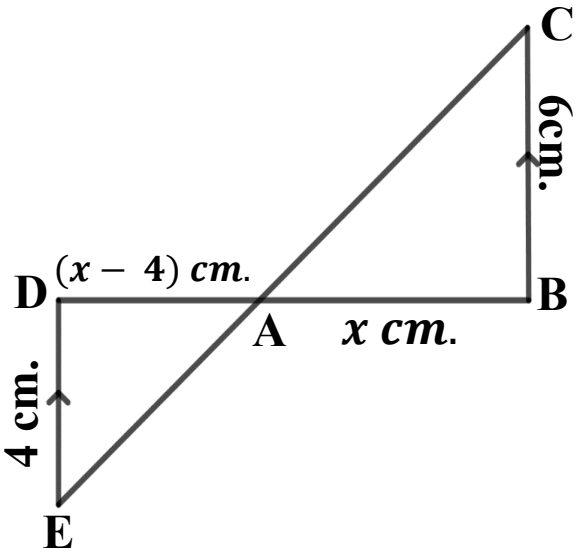
ABC is a triangle,X ∈ $\overline{AC}$, Y ∈ $\overline{AB}$
where $\overline{XY}$ // $\overline{BC}$
, AX = 4cm. CX = 2cm.
BC = $(k+3)\ cm.$ Xy = $(4k-3)\ cm.$



First: Prove that ΔABC ~ ΔAYX
Second: Find the value of k

15) From the data in the opposite figure:

First: Prove that: ΔABC ~ ΔADE
Second: Find the value of k



1) Find in simplest form the result of each of the following:

(g) $(3-4i)+(6+i)$

(h) $(\sqrt{9}-4i)-(-3+\sqrt{-16})$

(i) $(3-2i)(2-4i)$

2) Find the values of x and y that satisfy the equation:

$$\frac{(3-i)(3+i)}{2+2i} = x + yi$$

3) Find it in its simplest form

(c) $\frac{4-8i}{2i}$ (b) $\frac{13}{2-3i}$ (c) $\frac{5-i}{3-i}$

4) Find the expression in its simplest form $(1-i)^{10}$

5) Put the expression: $(1+2i^3)(2+3i^5+4i^6)$ in the form $x+yi$

6) Determine the quadrant in which each of the angles whose measures lie lies as follows:

(a) 72° (b) 215° (c) 135 ° (d) 340°

7) Determine the negative measure of the angles whose measure is as follows:

(a) 85° (b) 155° (c) 317 ° (d) 249°

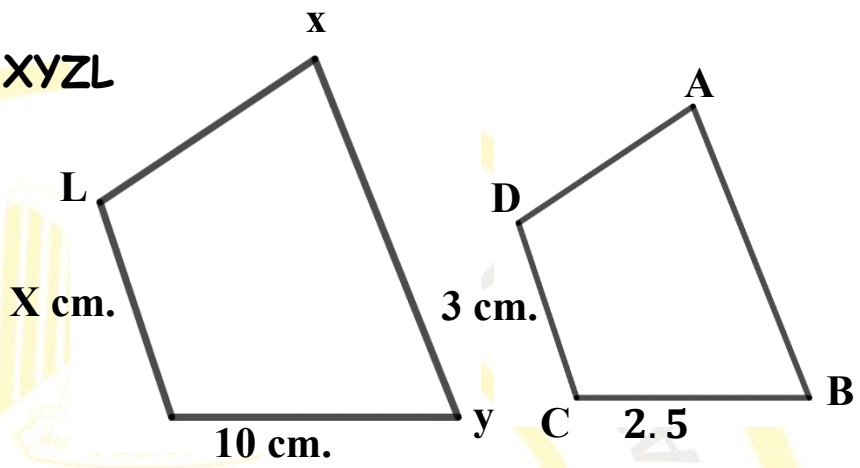
8) Find two angles, one with a positive measure and the other with a negative measure, the terminal side for each of the following angles:

(c) 160 ° (b) - 35 ° (c) -240 ° (d) 249 °

9) Determine the smallest positive measure for each of the following angles: (a) -35° (b) 565° (c) 940° (d) -480°

10) In the oppsite figure:

Polygon ABCD ~ Polygon XYZL



First: Find the numerical value of x

Second: Find factor of Similarity

11) A rectangle with dimensions of 20 cm and 12 cm. Find the dimension of another rectangle similar to it if:

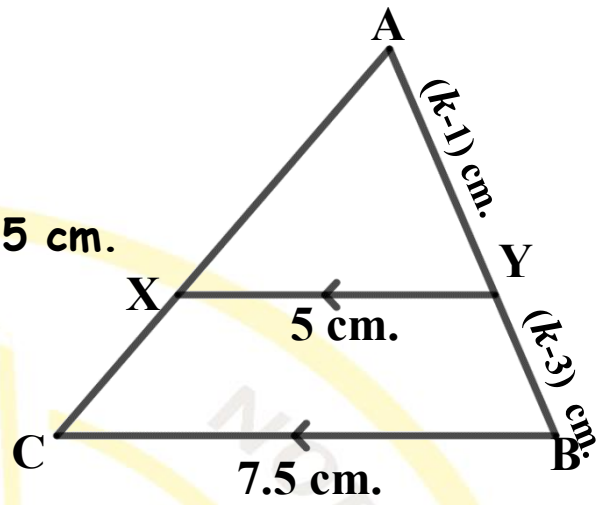
First: factor of Similarity = 2

Second: factor of Similarity = 0.5

12) A polygon with a perimeter of 40 cm. Find the perimeter of another similar polygon if the similarity factor = 3.

13) In the oppsite figure:

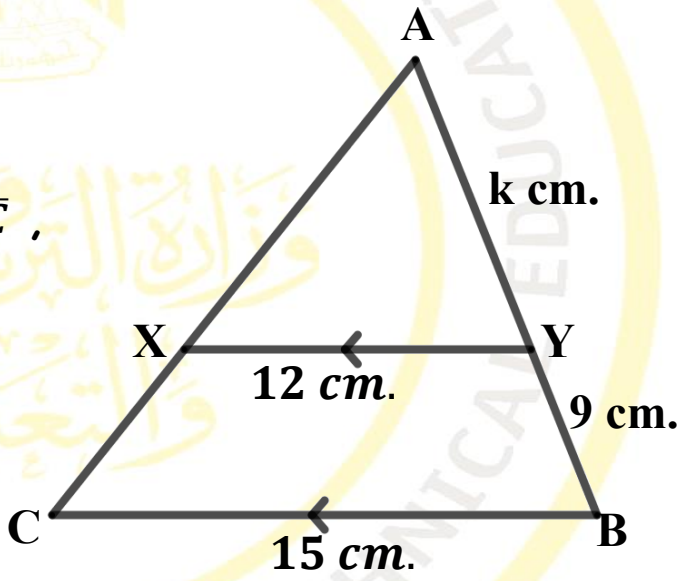
ABC is a triangle, Y ∈ $\overline{AB}$, X ∈ $\overline{AC}$,
where $\overline{XY}$ // $\overline{BC}$,
AY = (k-1) cm. YB = (k-3) cm. BC = 7.5 cm.
XY = 5 cm.
First: Prove that ΔABC ~ ΔAYX
Second: Find the value of k



14) In the oppsite figure:

ABC is a triangle, Y ∈ $\overline{AB}$, X ∈ $\overline{AC}$,
where $\overline{XY}$ // $\overline{BC}$,
AY = x cm. YB = 9 cm.
BC = 15 cm. XY = 12 cm.

First: Prove that ΔABC ~ ΔAYX
Second: Find the value of k



15) From the data in the opposite figure:
First: Prove that: ΔABC ~ ΔEDC
Second: Find the value of x