Geometry Final Exam

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MATH

Geometry Final Exam

This exam is comprehensive over the entire course and includes 12 questions. You have 60 minutes to complete the exam.

The exam is worth 100 points. The 8 multiple choice questions are worth 5 points each (40 points total) and the 4 free response questions are worth 15 points each (60 points total).

Mark your multiple choice answers on this cover page. For the free response questions, show your work and make sure to circle your final answer.

1. (5 pts) A B C D E

2. (5 pts) A B C D E

3. (5 pts) A B C D E

4. (5 pts) A B C D E

5. (5 pts) A B C D E

6. (5 pts) A B C D E

7. (5 pts) A B C D E

8. (5 pts) A B C D E

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1. **(5 pts)** Points $(1,3)$ and $(7,7)$ lie on line AB. What is the slope of a line parallel to AB?

A $\frac{1}{3}$

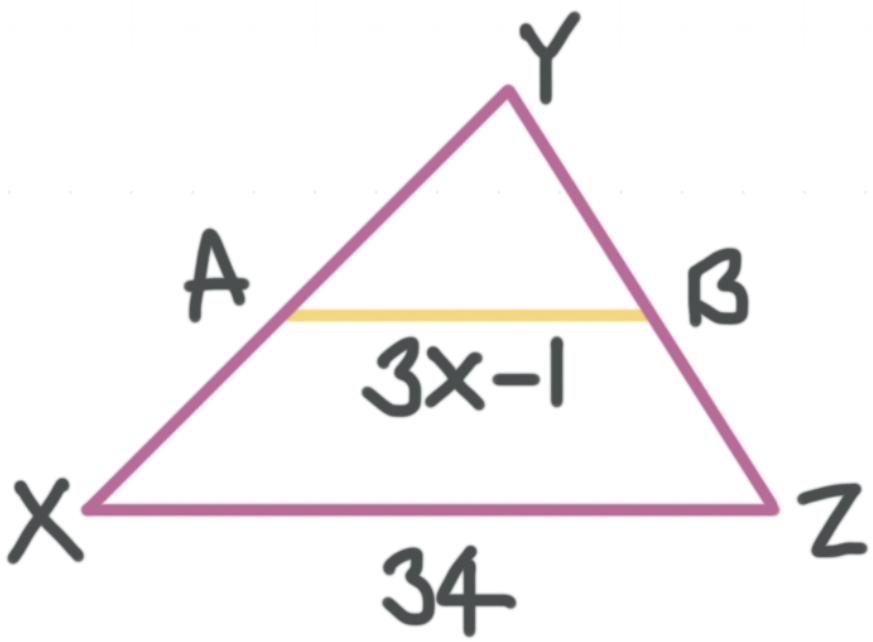
B $-\frac{2}{3}$

C $\frac{3}{2}$

D $\frac{2}{3}$

E $-\frac{3}{2}$

2. **(5 pts)** If $\overline{AB}$ is a midsegment of the triangle, what is the value of x?



A 6

B 17

C 18

D 24

E 34

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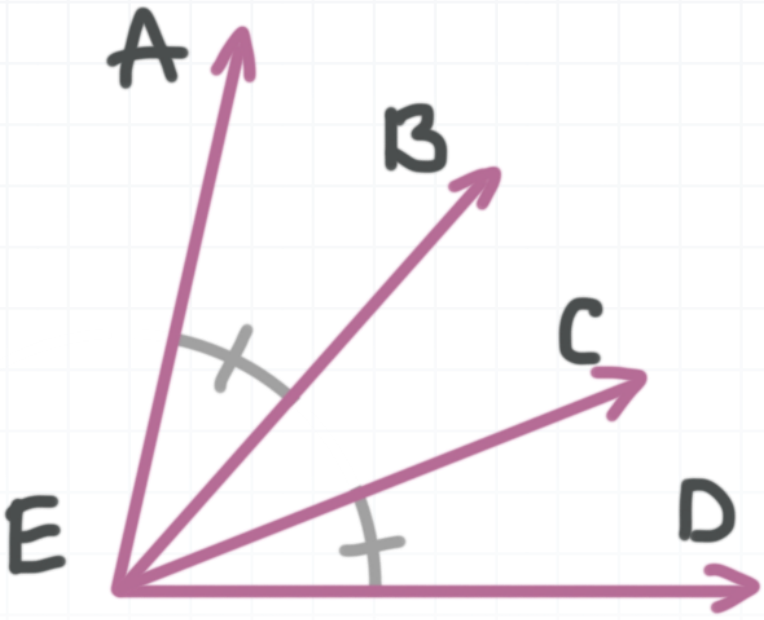
3. **(5 pts)** If $m\angle AED = 85°$ and $m\angle AEB = 25°$, what is $m\angle BED$?



A	$85°$	C	$35°$	E	$20°$
B	$60°$	D	$25°$		

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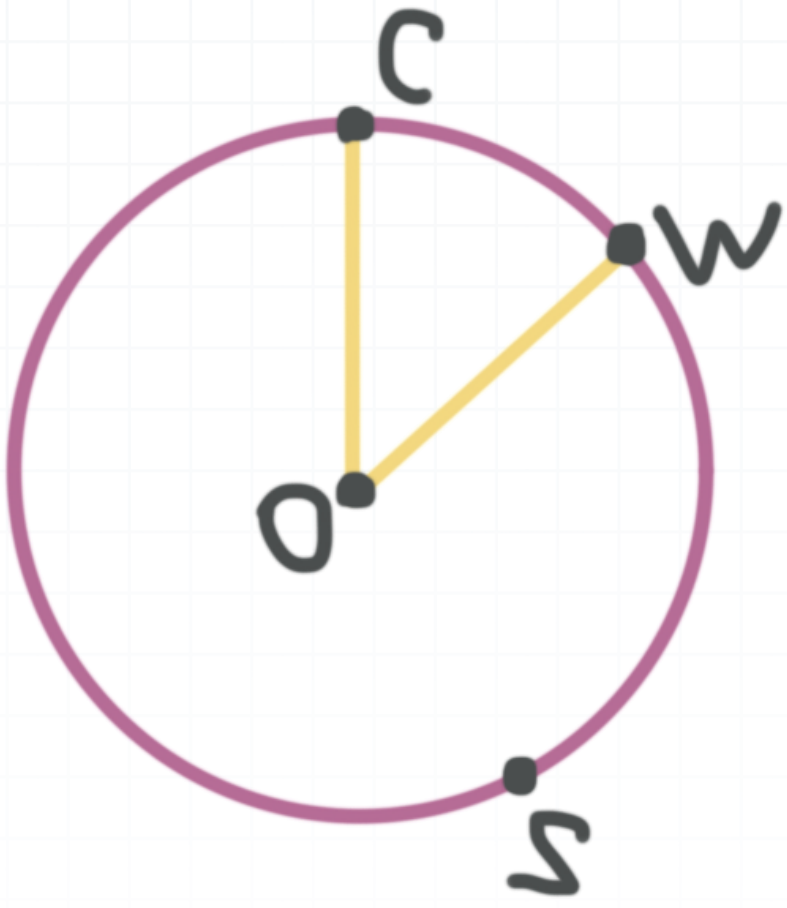
4. **(5 pts)** In the circle centered at O, the length of $\overline{OC}$ is 20, and $m\angle WOC = 45°$. What is the length of $\overset{\frown}{WSC}$?



A	5	C	20	E	109.9
B	15.7	D	35		

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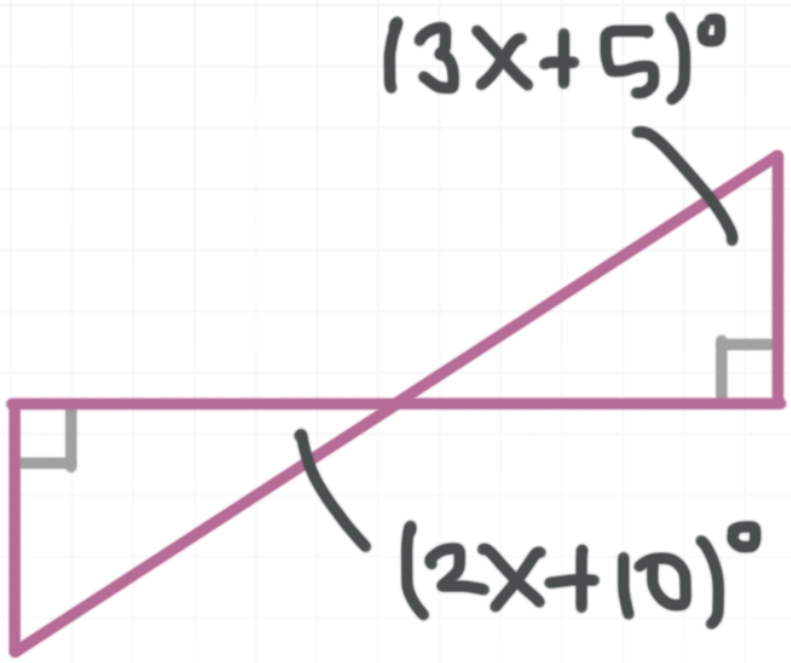
5. **(5 pts)** What is the value of x?



A	50°	D	10°
B	40°	E	5°
C	15°		

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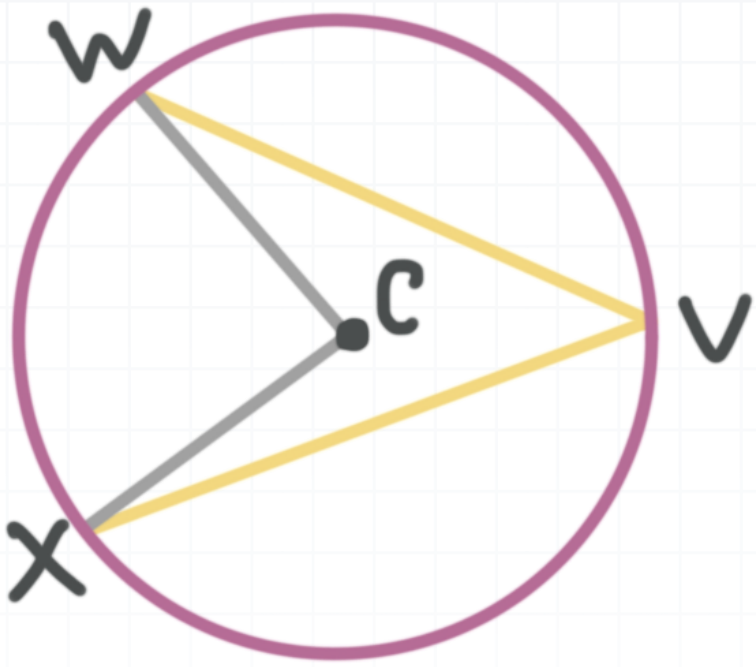
6. **(5 pts)** Find the measure of the inscribed angle WVX if $m\angle WCX = 62°$.



A	$15.5°$	C	$62°$	E	$124°$
B	$31°$	D	$90°$		

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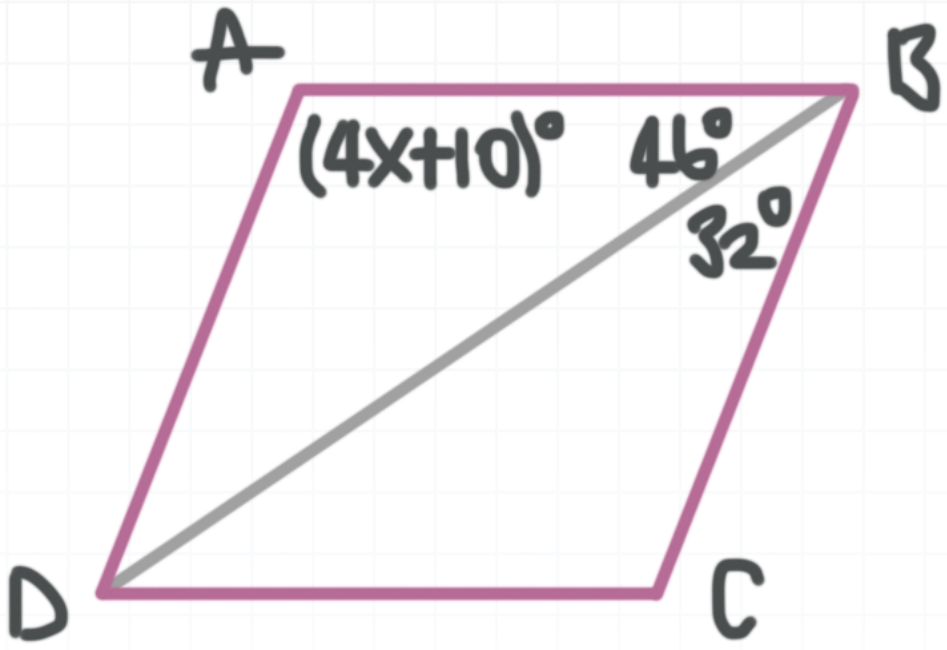
7. **(5 pts)** Find the value of x in the parallelogram?



A	102°	C	88°	E	13°
B	92°	D	23°		

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8. **(5 pts)** Which statement is the converse of the following statement?

"If two angles are congruent, then they have the same measure."

A If two angles are similar, then they have the same measure.

B If two angles have the same measure, then they are similar.

C If two angles do not have the same measure, then they are not congruent.

D If two angles are not congruent, then they do not have the same measure.

E If two angles have the same measure, then they are congruent.

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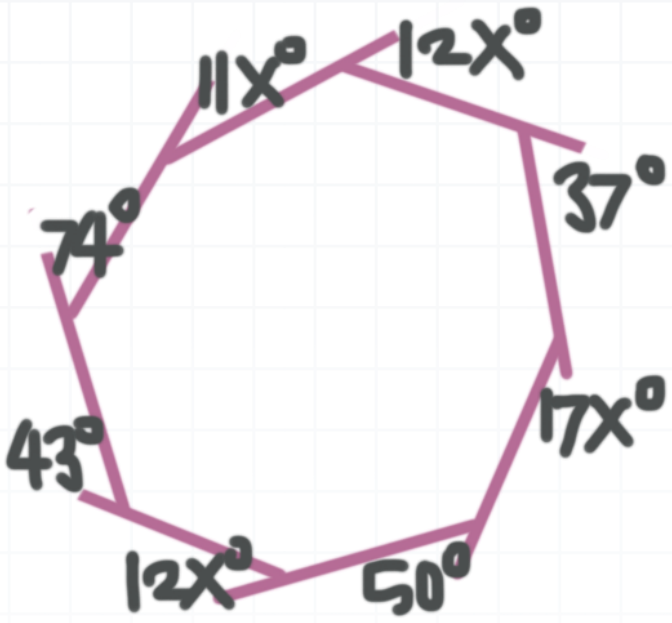
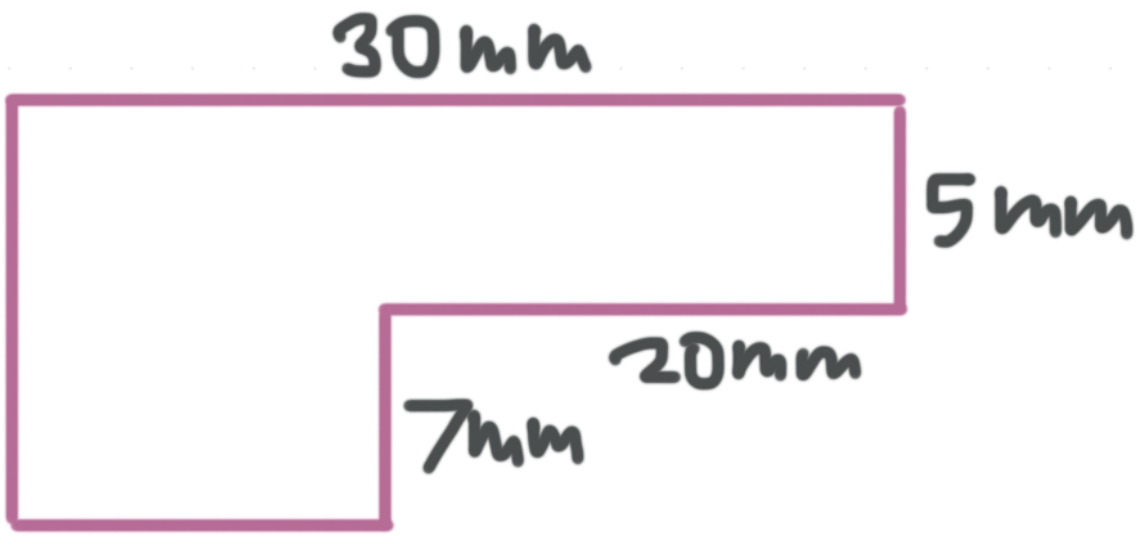
9. **(15 pts)** Find the value of x.



10. **(15 pts)** Find the area of the figure.



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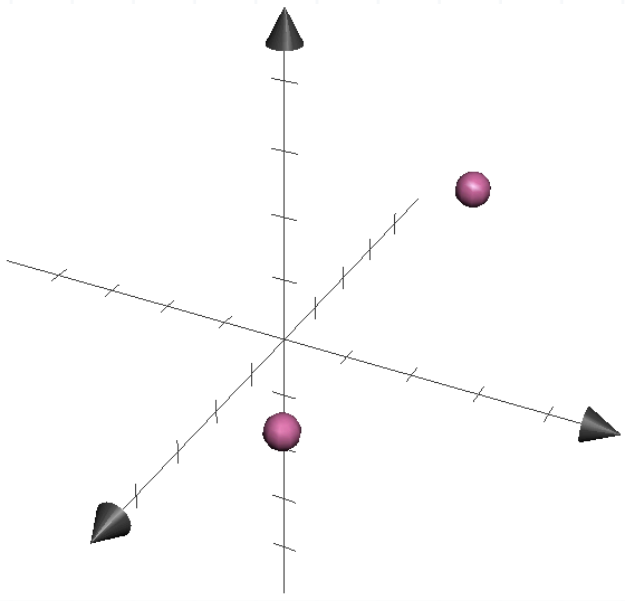
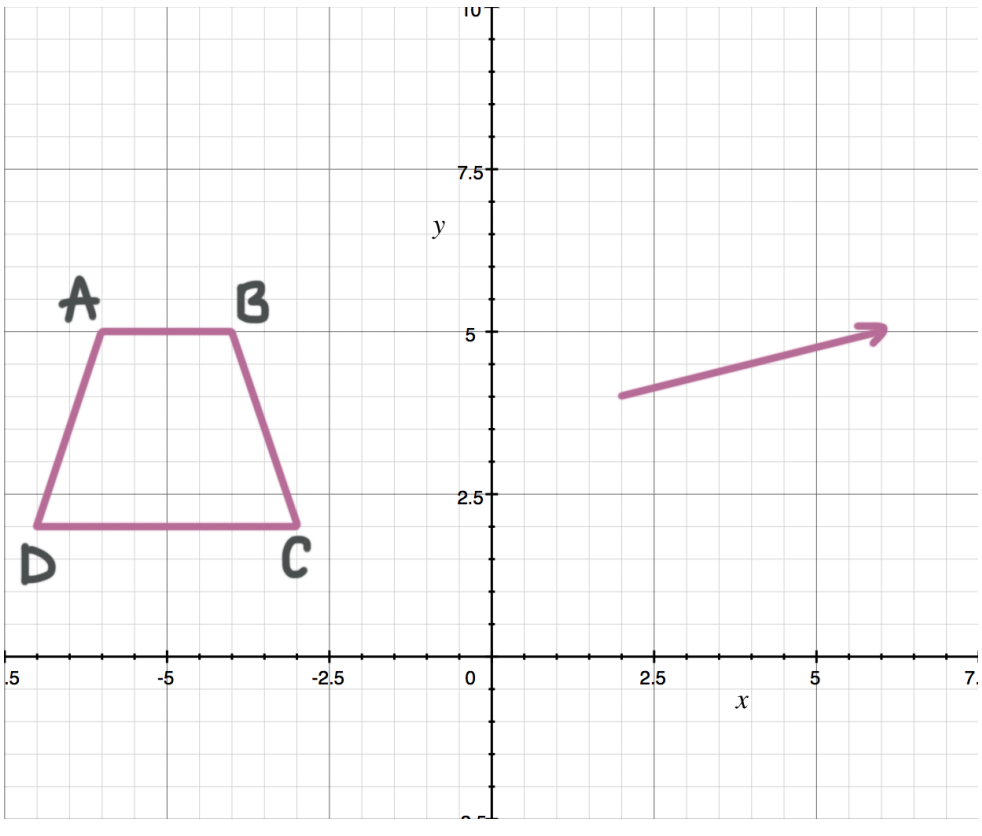
11. **(15 pts)** Two points, $A = (-2,2,2)$ and $B = (2,1,0)$, are plotted in three-dimensional space. Find the distance between Points A and B.



12. **(15 pts)** If trapezoid $ABCD$ undergoes a translation to $A'B'C'D$ as indicated by the vector shown, what are the coordinates for each vertex $A'B'C'D$?



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