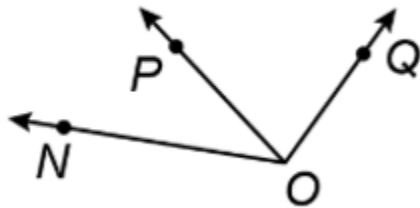
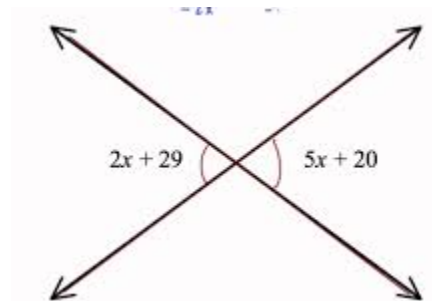


1. If $m\angle NOP = 32^\circ$ and $m\angle NOQ = 104^\circ$, what is $m\angle POQ$? (MC)

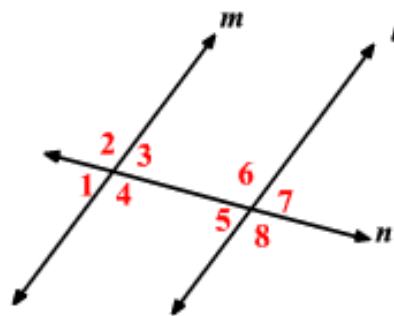


2. What is the value of x ? (SA)

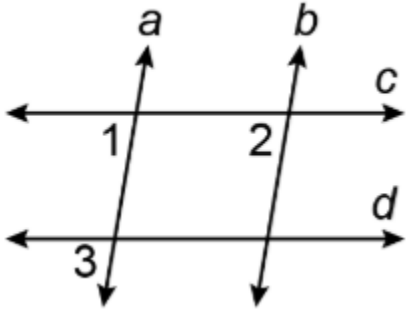


3. Which pairs of angles are alternate interior angles? Select all that apply.

- A. $\angle 1$ and $\angle 7$
- B. $\angle 3$ and $\angle 5$
- C. $\angle 1$ and $\angle 8$
- D. $\angle 4$ and $\angle 6$
- E. $\angle 2$ and $\angle 8$



4. If $a \parallel b$ and $m\angle 2 = 79^\circ$, what is $m\angle 1$? (MC)

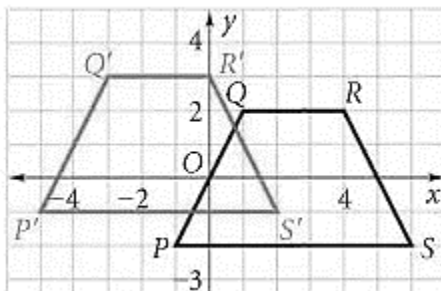


5. Which equation represent a line that is perpendicular to the line with equation $y = -5x - 7$? Select all that apply.

- A. $y = \frac{1}{5}x - 5$
- B. $y = \frac{-1}{5}x + 4$
- C. $-x - 5y = -4$
- D. $-x + 5y = 9$
- E. $x + 5y = 3$

6. If point B has coordinates $(-9, 5)$, what are the coordinates of the point when it is reflected across the y-axis? (MC)

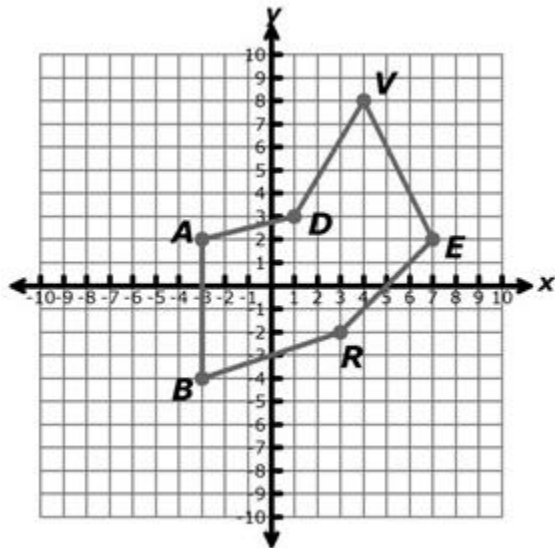
7. What translation rule maps PQRS to P'Q'R'S'? (MC)



8. Triangle ABC has vertices A(-2,5), B(6,-7) and C(-8,-1). What are the coordinates of B' after the translation describe by the rule $T_{(4,-8)}$?

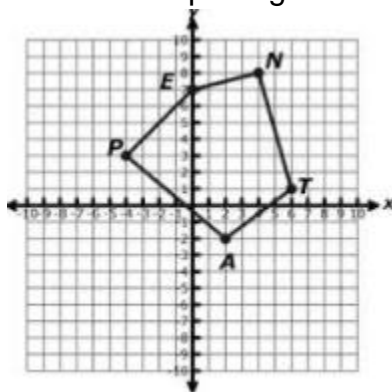
B' =

9. Use the polygon BADVER (MC)



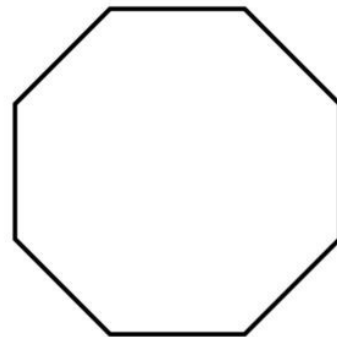
What are the coordinates of E' after the polygon is rotated 90° about the origin?

10. Use the pentagon BADVER (MC)



What are the coordinates of E' after the polygon is rotated 270° about the origin?

11. How many lines of symmetry does a regular hexagon have? (MC)



12. Which letter has rotational symmetry? (MC)

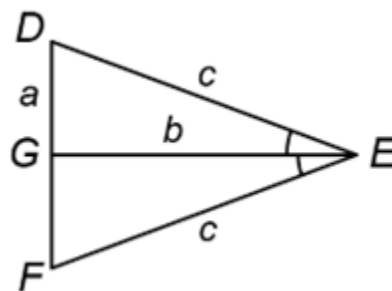
- A. X
- B. R
- C. A
- D. P

13. Triangle JKL is reflected across the x-axis to create Triangle J'K'L'. Choose the words to create a true statement.

The two triangles are /are not congruent because the transformation is a rigid transformation which changes / preserves the lengths of the sides and measures of all angles.

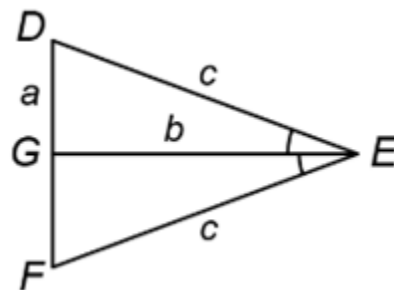
14. Use $\triangle DEF$. (MC)

What is $m\angle DFE$ if $m\angle DEG = 26^\circ$?

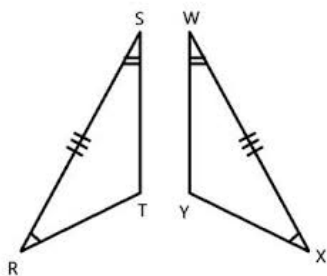


15. Use $\triangle DEF$. (MC)

Given that $m\angle EGF = 90^\circ$. What is the value of b is 12, and $c=36$? Round to the nearest whole number.

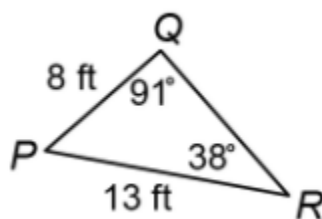
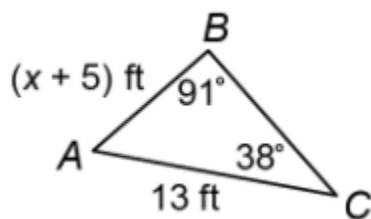


16. Which criterion can be used to prove the triangles are congruent? (MC)



- A. SSS
- B. SAS
- C. AAS
- D. SSA
- E. None of these

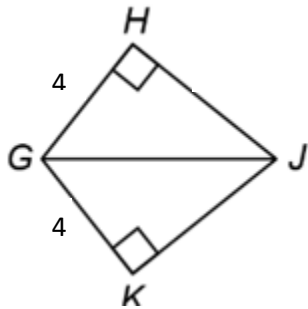
17. What is the value of x ? (SA)



18. Which criteria can be used to prove triangles are congruent? Select all that apply.

- A. SSS
- B. HL
- C. ASA
- D. SAS
- E. AAA
- F. AAS
- G. SSA

19. Which theorem can you use to prove that $\triangle GHJ$ and $\triangle GKJ$ are congruent? (MC)



20. Use the diagram shown.

Which side is congruent to \overline{JK} ? (MC)

