

Name: _____

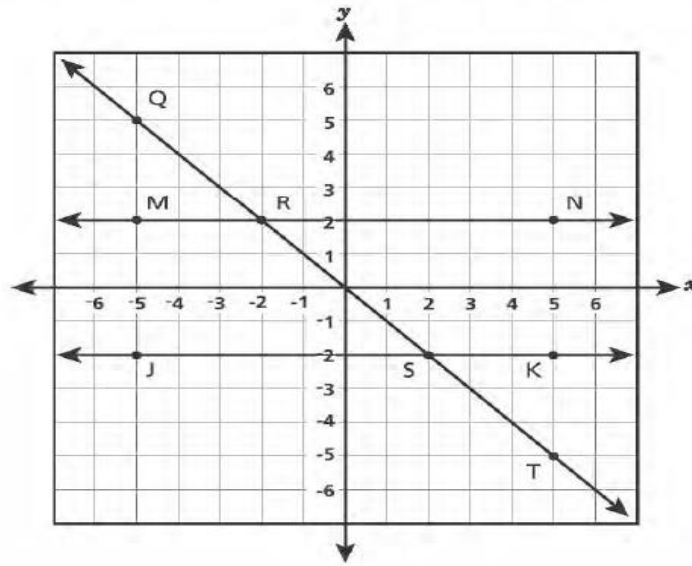
Date: _____

8.G.5

____ 1. Triangle M is similar to triangle N. Triangle M has two angles with measures of 32° and 93° . Which two angle measures could be included in triangle N? (2015 8.G.5)

- A. 32° and 58° B. 32° and 74° C. 93° and 55° D. 93° and 87°

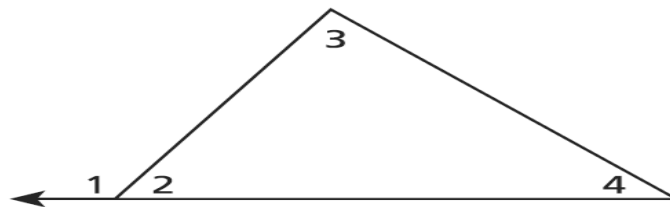
____ 2. In the diagram below, lines MN and JK are parallel and are intersected by line QT. (2016 8.G.5)



Which transformation could be used to show that $\angle MRS$ is congruent to $\angle JST$?

- A. reflect $\angle MRS$ over the x-axis C. translate $\angle MRS$ down and to the right
B. rotate $\angle MRS$ about the origin D. dilate $\angle MRS$ by a scale factor of two with the center at point R

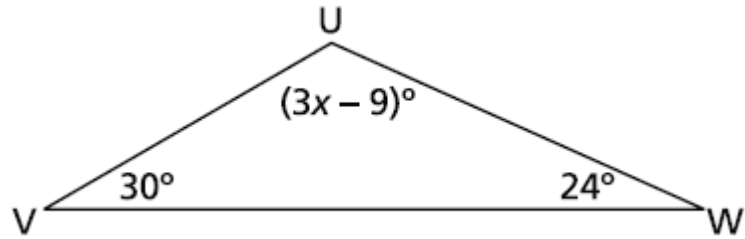
____ 3. Mya claims $(m\angle 3 + m\angle 4) = m\angle 1$, as shown in the triangle below. (2018 8.G.5)



Which equations explain why Mya's claim must be true?

- A. $(m\angle 1 + m\angle 2) = 90^\circ$ and $(m\angle 3 + m\angle 4) = 90^\circ$
B. $(m\angle 1 + m\angle 2) = 180^\circ$ and $(m\angle 3 + m\angle 4) = 180^\circ$
C. $(m\angle 1 + m\angle 2) = 90^\circ$ and $(m\angle 3 + m\angle 4 + m\angle 2) = 90^\circ$
D. $(m\angle 1 + m\angle 2) = 180^\circ$ and $(m\angle 3 + m\angle 4 + m\angle 2) = 180^\circ$

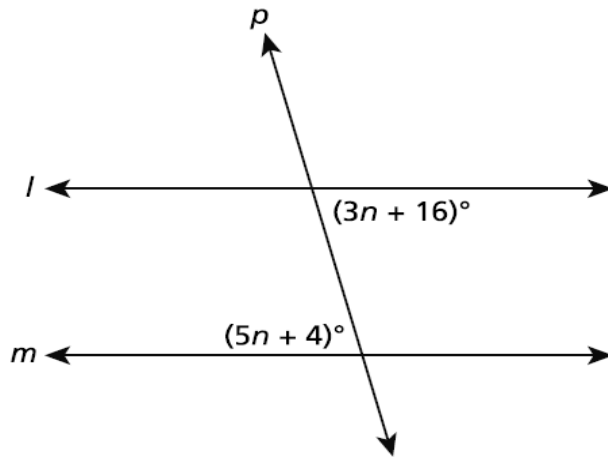
____ 4. The measures of the angles in triangle UVW are shown in the diagram below.
(2019 and 2021 8.G.5)



What is the value of x ?

- A. 21 B. 39 C. 45 D. 126

____ 5. Lines l and m are parallel and intersect transversal p , as shown in the diagram below.



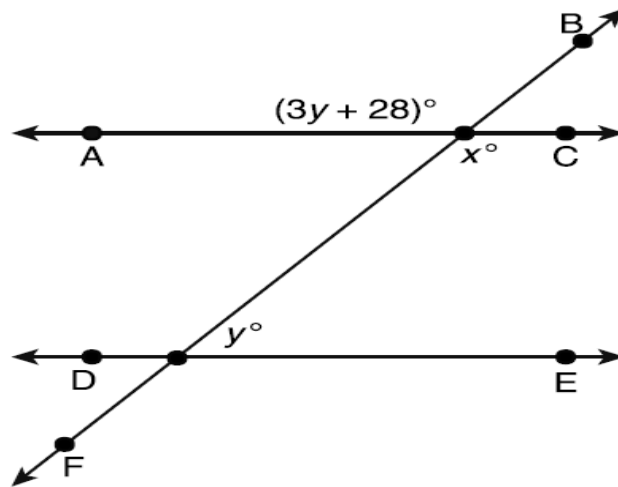
What is the value of n ?

(2022)

- A. 6 B. 10 C. 20 D. 24

6. In the figure shown below, \overleftrightarrow{AC} is parallel to \overleftrightarrow{DE} with transversal \overleftrightarrow{BF} .

(2022)



Determine the values of x and y .

Show your work.

Answer $x =$ _____

$y =$ _____