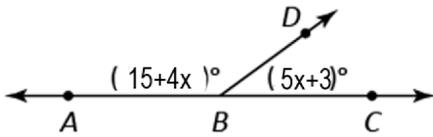


Geometry Common Assessment 4 REVIEW

1

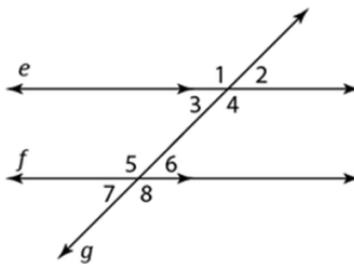
Point D is in the interior of $\angle ABC$. What is the $m\angle DBC$?



2

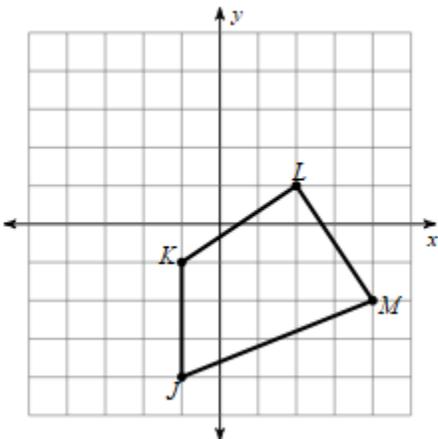
Which angle is congruent to $\angle 1$? Select all that apply. (**Choose 2 answers!!**)

- A. $\angle 5$
- B. $\angle 6$
- C. $\angle 7$
- D. $\angle 8$



3

Use quadrilateral JKLM. What are the coordinates of the image $R_{y\text{-axis}}(JKLM) = J'K'L'M'$?



J' = ()

K' = ()

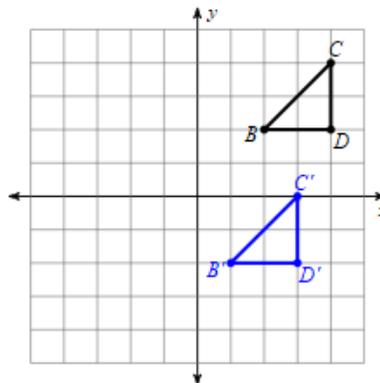
L' = ()

M' = ()

4

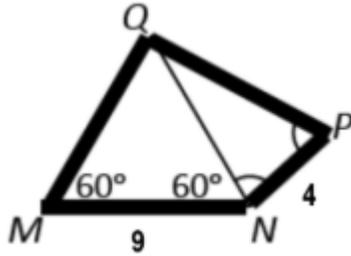
What is the rule for the translation of $\triangle BCD$ to $\triangle B'C'D'$? Select all that apply? (**Choose 2 answers!**)

- A. $T_{(1,4)}$
- B. $T_{(-1,-4)}$
- C. 1 unit down, 4 units left
- D. 1 unit left, 4 units down



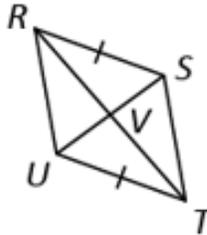
5

What is the perimeter of quadrilateral MNPQ? Perimeter of MNPQ =



6

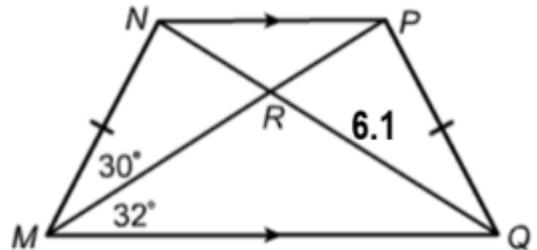
Refer to the diagram shown. If \overline{SU} and \overline{RT} bisect each other, which theorem(s) can be used to show that $\triangle RSV \cong \triangle TUV$? State at least two theorems that apply.



7.

Quadrilateral MNPQ is shown. If $MP = 10.4$, what is RN ?

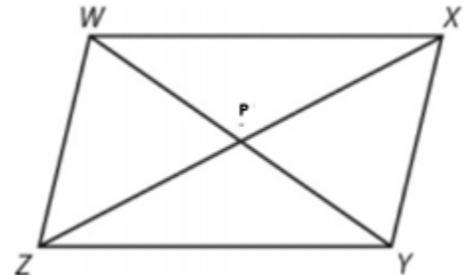
- A. 4.3
- B. 6.1
- C. 2
- D. not enough information



8.

The diagonal of parallelogram WXYZ intersects at P. Which statements must be true? Select all that apply. (Choose 3 answers!!)

- A. $m\angle WXY + m\angle YZW = 180^\circ$
- B. $\angle YWZ \cong \angle WYX$
- C. $\overline{XY} \cong \overline{WZ}$
- D. $\overline{WP} \cong \overline{YP}$



9.

How do the angles and side lengths of the preimage relate to the corresponding angles and side lengths of the image of a dilation with a scale factor not equal to 1?

10.

The point A has coordinates A(5,8). What are the coordinates of A' for the dilation $D_{2.5}(A)$?

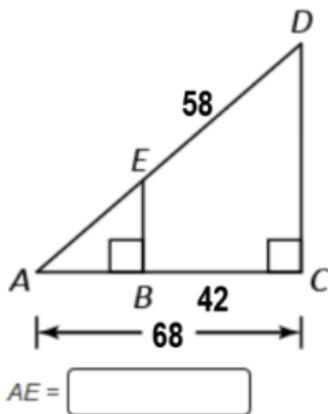
A' (_____ , _____)

11.

The image of a figure that undergoes one or more rigid motions and a dilation is always _____ its preimage.

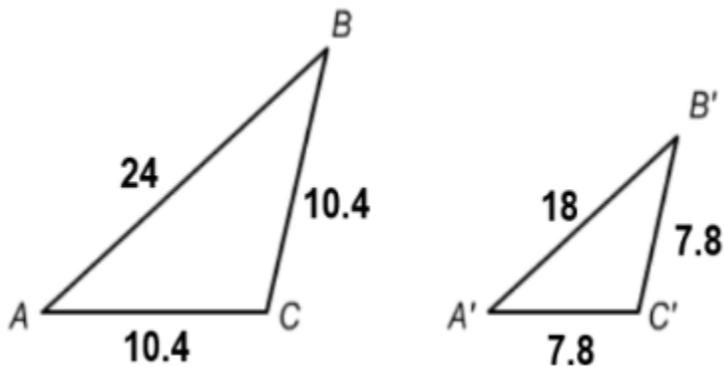
12.

Given $\triangle ADC$ and $\triangle AEB$. What is AE? (Hint: Find AB first.)



13.

What is the scale factor of the dilation shown?



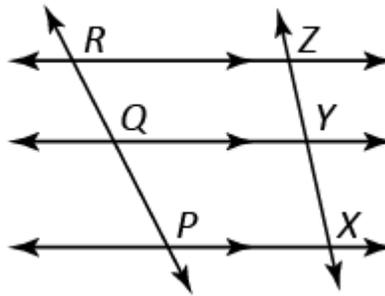
14. What conclusion does the diagram support?

A. $PX = \frac{1}{2}RZ$

B. $\frac{QY}{RZ} = \frac{PX}{QY}$

C. $QY = \frac{1}{2}PX$

D. $\frac{PQ}{QR} = \frac{XY}{YZ}$



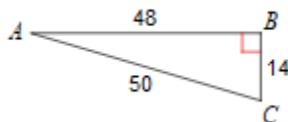
15. What is AB?



AB =

16. What is a triangle midsegment? What is the relationship between a triangle midsegment and the third side of the triangle?

17. What is the cosine ratio of $\angle C$?



A. $\frac{24}{7}$

B. $\frac{7}{24}$

C. $\frac{7}{25}$

D. $\frac{25}{7}$

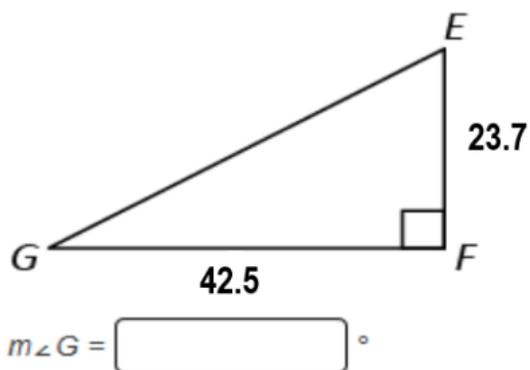
18.

Which value is equal to $\frac{\sqrt{2}}{2}$? Select two answers.

- A. $\sin 45^\circ$
- B. $\tan 30^\circ$
- C. $\tan 45^\circ$
- D. $\sin 30^\circ$
- E. $\cos 60^\circ$
- F. $\cos 45^\circ$

19.

What is $m\angle G$ to the nearest tenth?



20.

The angle of elevation from a viewer to the top of a flagpole is 43 degrees. The viewer is 76 feet away and the viewer's eyes are 5.5 feet from the ground. How high is the pole to the nearest tenth of a foot?

First find x and then find the height of the pole.

