

| Geometry <br> Foundations | Lines and Angles | Triangle Congruence | Properties of Triangles | Quadrilaterals |
| :---: | :---: | :---: | :---: | :---: |
| 5 pt | 5 pt | 5 pt | 5 pt | 5 pt |
| 10 pt | 10 pt | 10 pt | 10 pt | 10 pt |
| 15 pt | 15 pt | 15 pt | 15 pt | 15 pt |
| 20 pt | 20 pt | 20 pt | 20 pt | 20 pt |
| 25 pt | 25 pt | 25 pt | 25 pt | 25 pt |

## Which of $\overrightarrow{P Q}$ and $\overleftrightarrow{Q R}$ contains $P$ ?


A $\overline{P Q}$ only
C Both
B $\overleftrightarrow{Q R}$ only
D Neither

## What is C Both?

$K$ is between $J$ and $L$. $J K=3 x-5$, and $K L=2 x+1$. If $J L=16$, what is $J K$ ?

F 7
H 9
G 8
J 13

What is

$$
F-7
$$

$\overrightarrow{S U}$ bisects $\angle R S T$. If $\mathrm{m} \angle R S T=(8 x+15)^{\circ}$ and $\mathrm{m} \angle R S U=5 x^{\circ}$, what is $\mathrm{m} \angle R S T$ ?
A $25^{\circ}$
C $50^{\circ}$
B $37.5^{\circ}$
D $75^{\circ}$

What is D - 75

If the complement of an angle measures $22^{\circ}$, what is the measure of its supplement?
F $68^{\circ}$
H $112^{\circ}$
G $78^{\circ}$
J $158^{\circ}$

## What is $\mathrm{H}-112$ ?

The midpoint of a segment is $(-7,-5)$, and one of the endpoints is $(-9,-10)$.
Where is the other endpoint?
A ( $-8,-7.5$ )
B $(-5,0)$
C ( $-5,-7$ )
D (0,0)

What is $B-(-5,0) ?$

Complete the statement.
Two lines are parallel if the same-side interior angles are ___ angles.
F complementary
G supplementary
H congruent
J corresponding

## What is G - <br> Supplementary?

Which angles are alternate interior angles?


A $\angle 1$ and $\angle 4 \quad$ C $\angle 3$ and $\angle 4$ B $\angle 1$ and $\angle 5$

D $\angle 3$ and $\angle 7$

## What is D $<3$ and $<7$ ?



What are alternate
exterior angles?

A line passes through the points $(5,-8)$ and $(6,2)$. What is the slope?

$$
\text { A }-10
$$

$$
\text { C } \frac{1}{10}
$$

$$
B-\frac{6}{11}
$$

$$
\text { D } 10
$$

What is D: 10 ?

What is the slope of the line perpendicular to $y=-\frac{2}{5} x+9$ ?

$$
\text { F - } 2 / 5
$$

G $5 / 2$
H $2 / 5$
J $-5 / 2$

What is G: 5/2?


Which congruence shortcut can prove these triangles congruent?

## What is AAS?

Why is $\triangle P Q S \cong \triangle R Q S$ ?

A SAS
C AAA
B ASA
D HL

## What is <br> B: ASA?



# If $\triangle B D A \cong \triangle B D C$, then why is $\mathrm{AD} \cong \mathrm{CD}$ ? 

## What is CPCTC?

One of the base angles of an isosceles triangle is $40^{\circ}$. Which is the triangle classification according to its angles?
$F$ acute
G right

H obtuse
$J$ equiangular

What is H: Obtuse

Three sides of a triangle are shown. Which triangle is obtuse?

$$
\begin{array}{ll}
\text { F } 3,4,5 & \text { H 4, 5, } 6 \\
\text { G } 5,12,13 & \text { J 4, 7, } 10
\end{array}
$$

$\frac{\text { What is J: }}{4,7,10}$

## The circumcenter is

 where theof a triangles intersect. A: Angle Bisectors B: Medians
C: Perpendicular Bisectors D: Altitudes

## What is C: Perpendicular Bisectors

Angle bisectors of a triangle intersect at the incenter, which is equidistant to:

A: sides
B: angles

C: midpoints
D: altitudes

## What is A: Sides

# The centroid of a triangle splits its medians into a ratio. 

What is $2: 1$
$\overline{P Q}$ is a midsegment. What is $P Q$ ?


F 16
G 17

H 32
J 34

## What is G: <br> 17?

## This point is a triangle's center of gravity.

## What is a centroid?

## The shape below is a parallelogram for this reason.



## What are congruent opposite angles?

## The parallelogram below is a rhombus for this reason.



## What is one pair of consecutive congruent sides?

## The diagonals of a rhombus and this

 type of quadrilateral are perpendicular.What is a kite?

$$
\begin{gathered}
\text { Proving a given } \\
\text { quadrilateral is a } \\
\text { square requires } \\
\text { showing these two } \\
\text { categories apply. }
\end{gathered}
$$

# What is a rectangle and a rhombus? 

$$
\begin{aligned}
& \text { A square has } \\
& \text { diagonals that are } \\
& \text { both congruent and } \\
& \text { this. }
\end{aligned}
$$

## What is <br> perpendicular?

## FINAL JEOPARDY

Art and Painting

Parallel lines appear to intersect because of this phenomenon.

## What is linear perspective?



