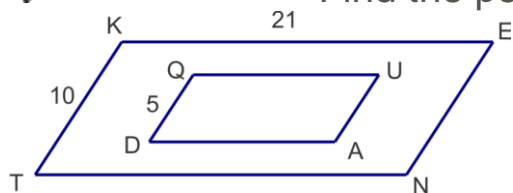


3rd Quarter Exam – Geometry – Easy Peasy All-in-One High School

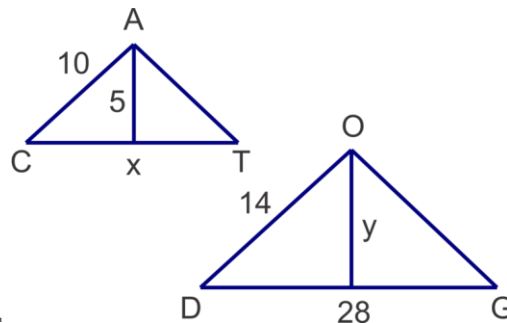
Section 7.2

#24

$QUAD \sim KENT$ Find the perimeter of $QUAD$.



#25 (2 points)

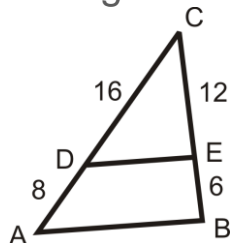


$\triangle CAT \sim \triangle DOG$ Solve for x and y .

Section 7.5

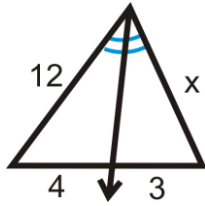
#11

Use the given lengths to determine if $\overline{AB} \parallel \overline{DE}$.



#15

Find the value of the missing variable(s).



Section 7.6

#1 (2 points)

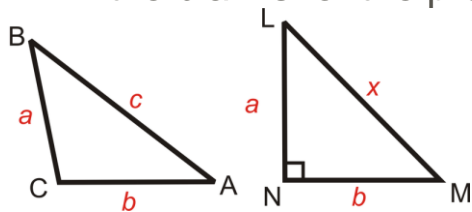
Given A and the scale factor, determine the coordinates of the dilated point, A' . You may assume the center of dilation is the origin.

1. $A(3, 9), k = \frac{2}{3}$

Section 8.2

#22 (10 points)

Fill in the blanks for the proof.



Given: In $\triangle ABC$, $a^2 + b^2 < c^2$, where c is the longest side. In $\triangle LMN$, $\angle N$ is a right angle.

Prove: $\triangle ABC$ is an obtuse triangle.

Statement

Reason

1. In $\triangle ABC$, $a^2 + b^2 < c^2$, and c is the longest side.

In $\triangle LMN$, $\angle N$ is a right angle.

Statement**Reason**

2. $a^2 + b^2 = h^2$

3. $c^2 > h^2$

4.

5. $\angle C$ is the largest angle in $\triangle ABC$.

6. $m\angle N = 90^\circ$

7. $m\angle C > m\angle N$

8.

Transitive
PoE9. $\angle C$ is an obtuse angle.10. $\triangle ABC$ is an obtuse triangle.

Section 8.4

1. In an isosceles right triangle, if a leg is x , then the hypotenuse is _____.2. In a 30-60-90 triangle, if the shorter leg is x , then the longer leg is _____ and the hypotenuse is _____.

3. A square has sides of length 15. What is the length of the diagonal?

4. A square's diagonal is 22. What is the length of each side?

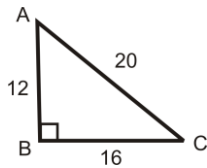
5. A rectangle has sides of length 4 and $4\sqrt{3}$. What is the length of the diagonal?

6. A baseball diamond is a square with 90 foot sides. What is the distance from home base to second base? (HINT: It's the length of the diagonal).

Section 8.5

#14 (3 points)

Find the sine, cosine and tangent of $\angle A$. Reduce all fractions and radicals.



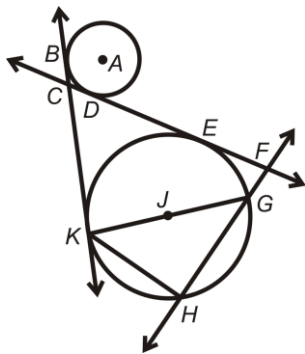
Section 8.6

#17

A 75 foot building casts an 82 foot shadow. What is the angle that the sun hits the building?

Section 9.1

Determine which term best describes each of the following parts of $\odot P$.



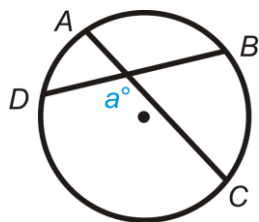
1. \overline{KG}

2. \overleftrightarrow{FH}

3. \overline{KH}
4. E
5. \overleftrightarrow{BK}
6. \overleftrightarrow{CF}
7. A
8. \overline{JG}
9. What is the longest chord in any circle?

Section 9.5

#31 (12 points)



Given: Intersecting chords \overline{AC} and \overline{BD}

Prove: $m\angle a = \frac{1}{2} (m\widehat{DC} + m\widehat{AB})$

HINT: Draw \overline{BC} and use inscribed angles.

Total: 48 points