

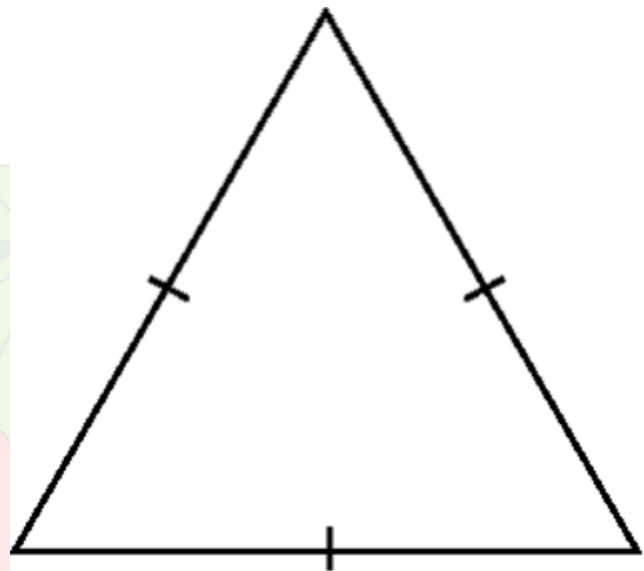
1. Write the sides of $\triangle IJK$ in order from shortest to longest.

$$56 + 62 = \frac{180}{40}$$

I	J	K
^	^	^
JK	KI	IJ

Dec 12-9:05 AM

equilateral
acute



2. Classify the triangle according to its sides and angles.

Dec 12-9:05 AM

3. The equations of four lines are given. Identify the parallel lines..

7 Line 1 $y = 7x - 8$

$\frac{1}{7}$ Line 2 $y + 5 = \frac{1}{7}(x - 9)$

4 Line 3 $y = 4x - 5$

4 Line 4 $x - \frac{1}{4}y = -7$

Same slope

$y = mx + b$

$y - y_1 = m(x - x_1)$

~~$x - \frac{1}{4}y = -7$~~

~~$7y = -x - 7$~~

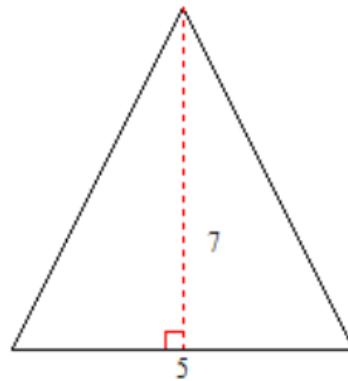
$y = 4x + 28$

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$A = \frac{1}{2}bh$

$\frac{1}{2} \cdot 5 \cdot 7$

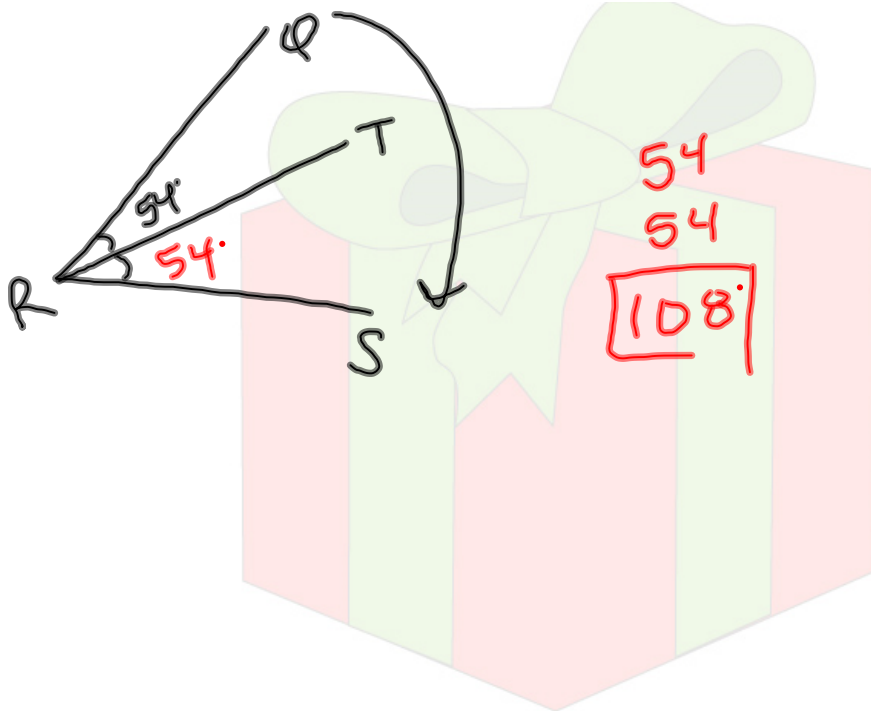
$\frac{1}{2}(35)_{35 \div 2} = 17.5$



4. Find the area of the triangle.

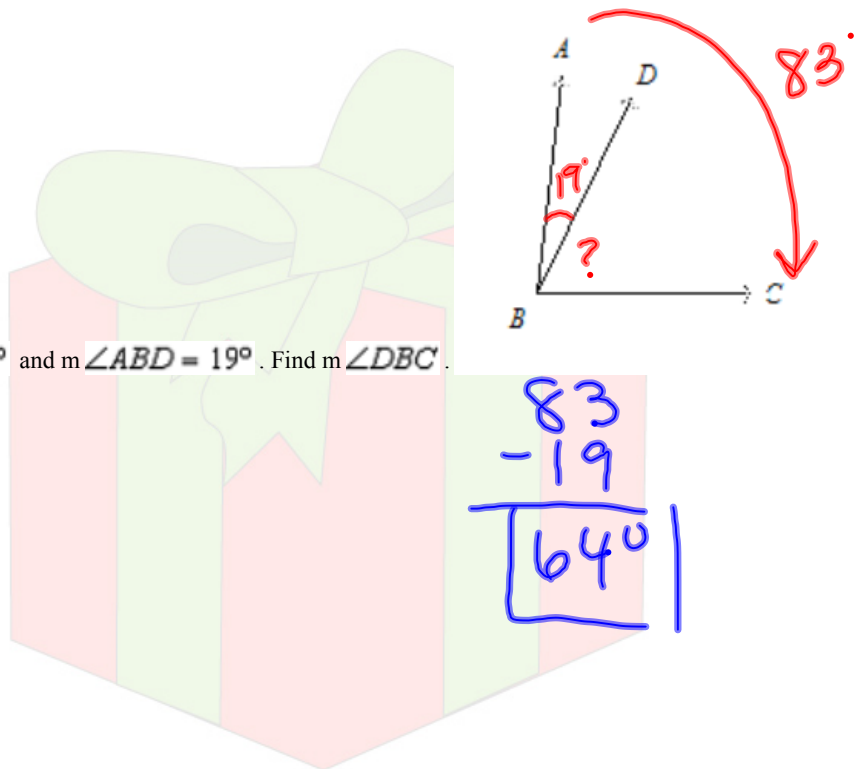
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5. \overrightarrow{RT} bisects $\angle QRS$. if $m\angle QRT = 54^\circ$, what is $m\angle QRS$

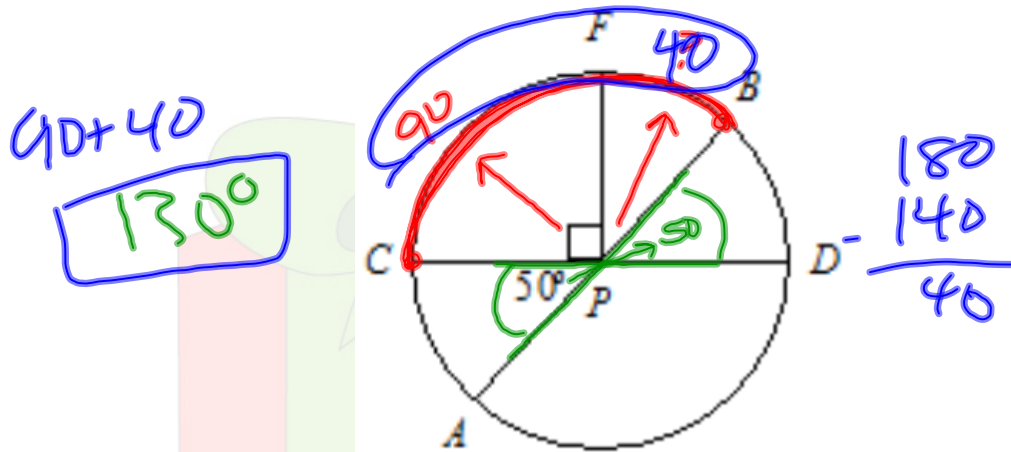


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6. $m\angle ABC = 83^\circ$ and $m\angle ABD = 19^\circ$. Find $m\angle DBC$.



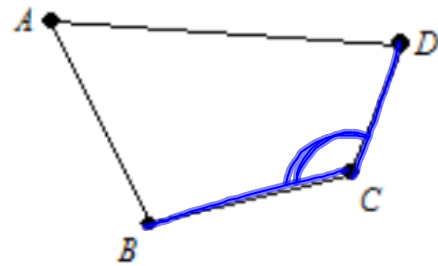
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7. What is m

\widehat{CFB} ?

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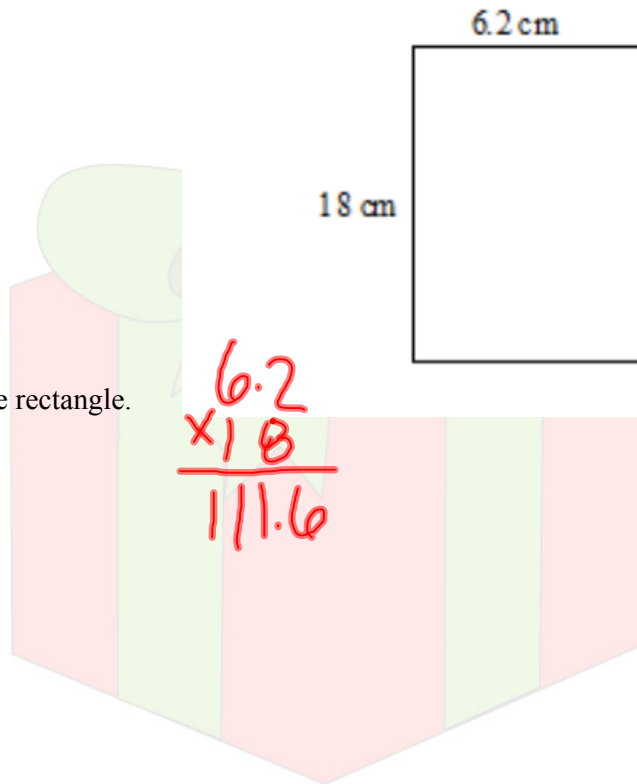


8. What is the included angle of

\overline{DC} and \overline{BC} ?

$\angle C$

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9. Find the area of the rectangle.

$$\begin{array}{r} 6.2 \\ \times 18 \\ \hline 111.6 \end{array}$$

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10. \vec{LH} bisects $\angle GLI$. What is the measure of $\angle K LH$?

154°

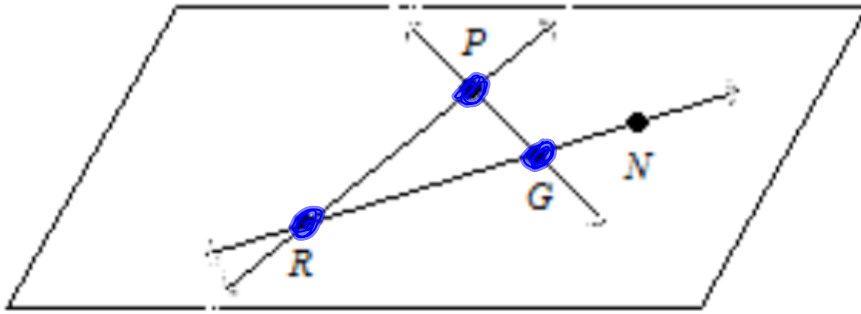
$$\frac{90}{38}$$

$$180 - 128 = 52$$

$$\frac{52}{2} = 26$$

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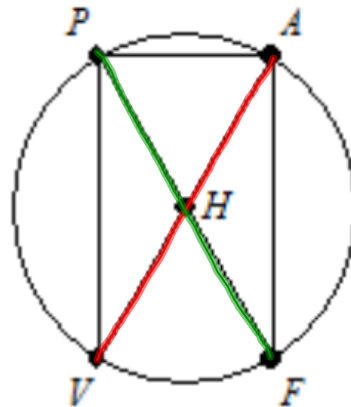
11. Identify all points of intersection of lines shown on plane PGN .



P, R, G

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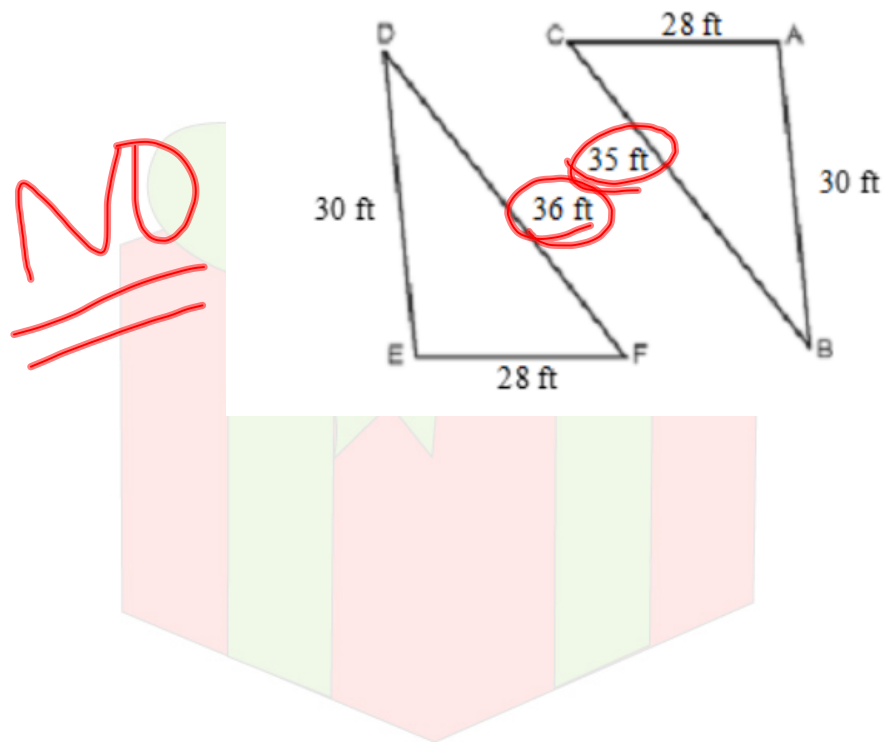
12. Identify the diameters in circle H .



\overline{AV} , \overline{PF}

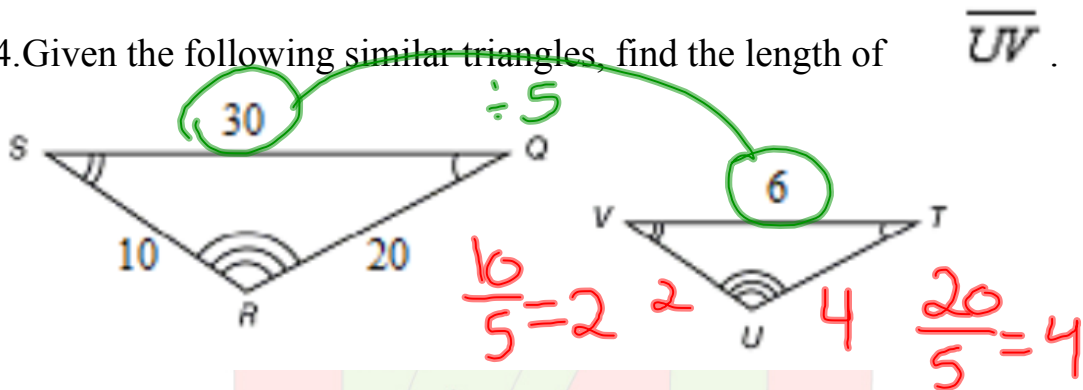
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13. Determine whether the triangles are congruent.



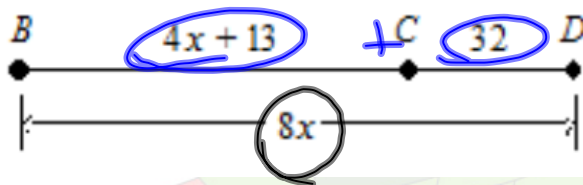
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14. Given the following similar triangles, find the length of \overline{UV} .



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15. C is between B and D . $BD = 8x$, $BC = 4x + 13$, and $CD = 32$. Find BD .



$$8x = 4x + 13 + 32$$

$$8x = 4x + 45$$

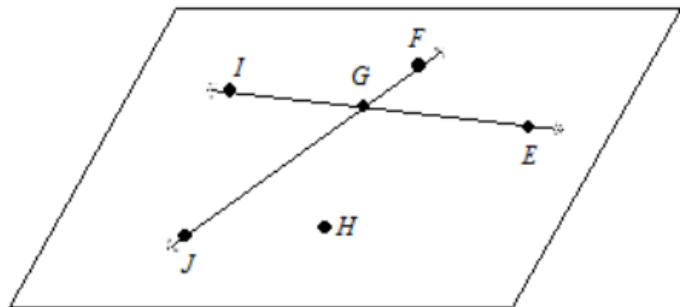
$$\begin{array}{r} 8x \\ -4x \\ \hline 4x = 45 \end{array}$$

$$x = \frac{45}{4}$$

$$x = 11.25$$

$$8(11.25) = \boxed{90}$$

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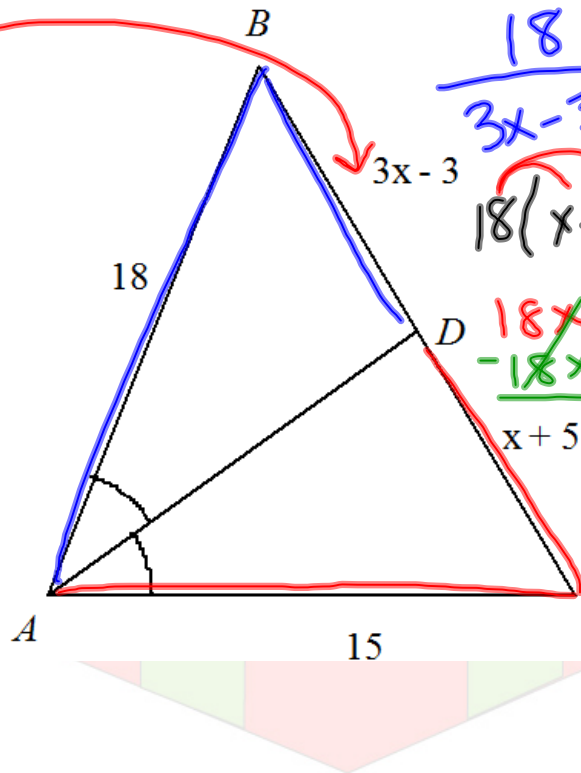
16. Identify three points in the diagram.

I, J, H, E, F, G

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17. Find BD

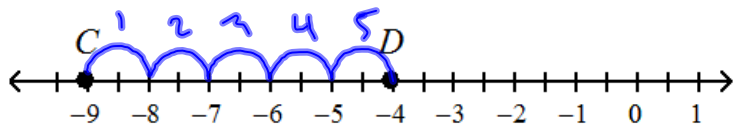
$3x - 3$
 $3(5) - 3$
 $15 - 3$
 12



$\frac{18}{3x-3} = \frac{15}{x+5}$
 $18(x+5) = 15(3x-3)$
 $18x + 90 = 45x - 45$
 $-18x \quad -18x$
 $x + 5 \quad 90$
 $+45 \quad 27x - 45$
 $135 \quad 27x$
 $27 \quad 27$
 $x = 5$

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18. Find the length of \overline{CD} .



5
 $|-9 - (-4)| = 5$

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Dec 13-9:23 AM