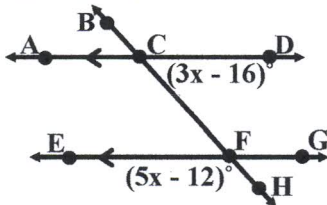
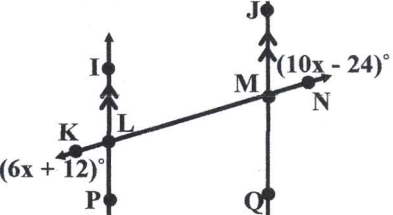
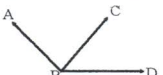
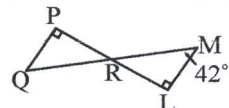
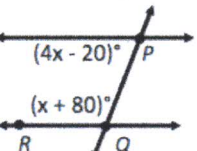
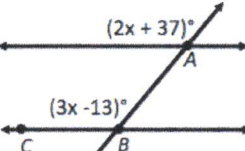
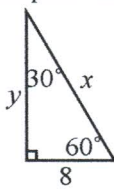
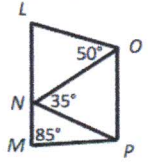

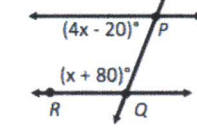
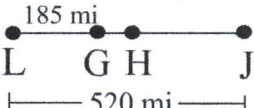
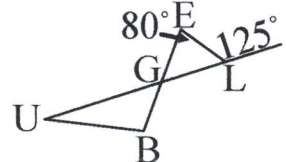
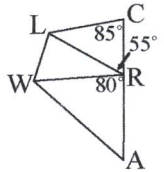
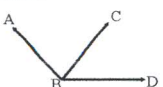
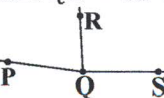
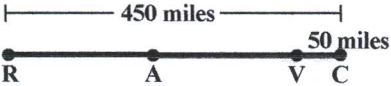
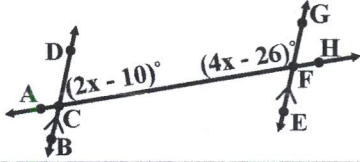
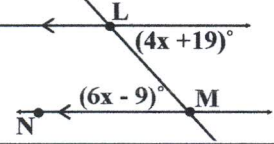
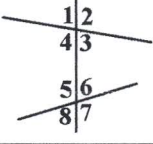
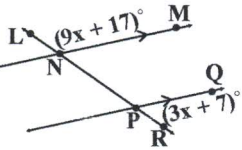
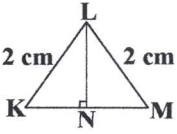
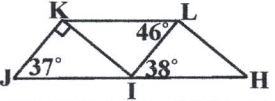
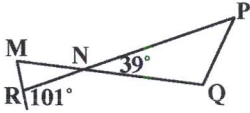
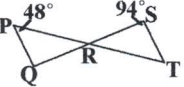
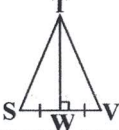
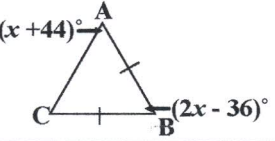
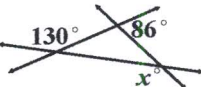
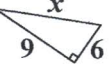
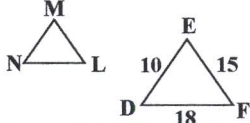
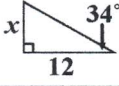
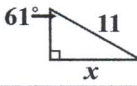


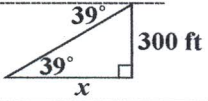
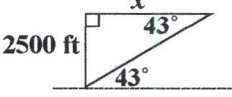
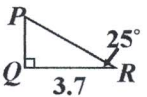
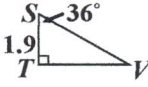
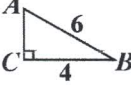
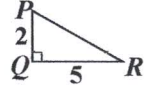
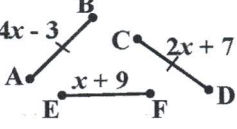
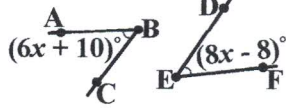
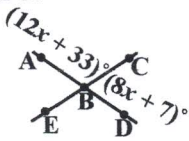
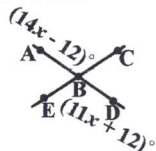
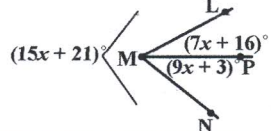
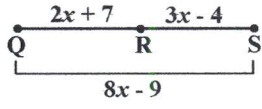
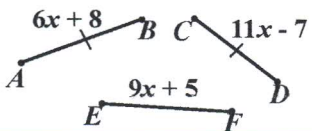
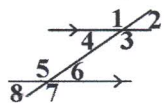
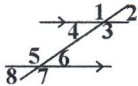
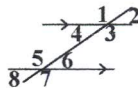
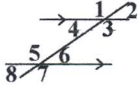
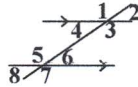
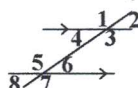
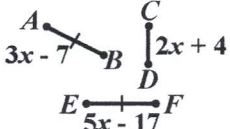
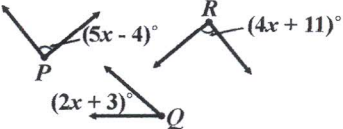
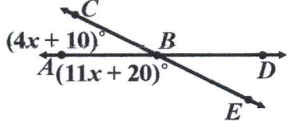
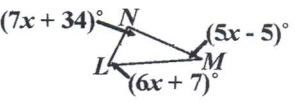
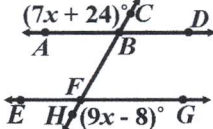
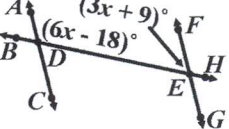

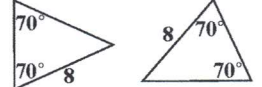
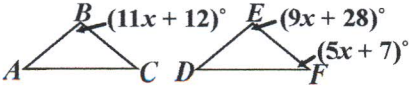
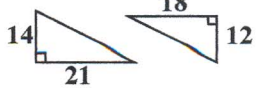


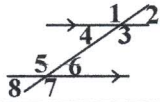
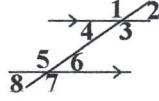
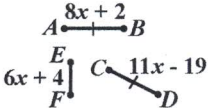
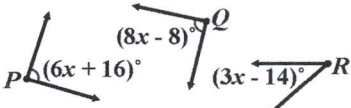
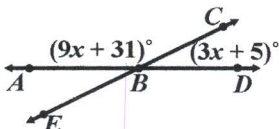
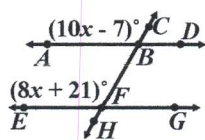
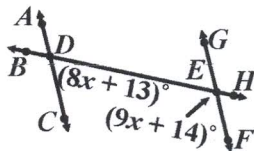
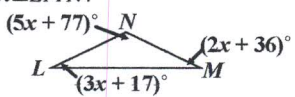

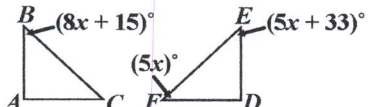
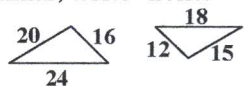
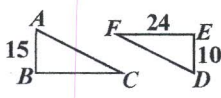
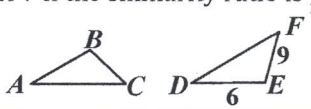
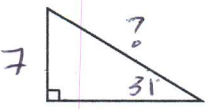
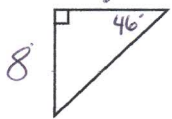
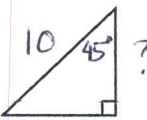
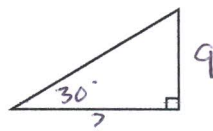
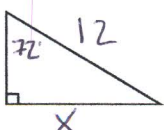
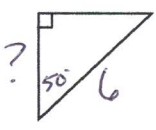
285.	<p>Find $m\angle DCF$.</p> 	286.	<p>Find $m\angle KLP$.</p> 
287.	<p>$m\angle ABC = 62^\circ$ and $m\angle CBD = 36^\circ$. Find $m\angle ABD$.</p> 	288.	<p>$\triangle PQR \cong \triangle LMR$ and $m\angle M = 42^\circ$, find $m\angle PRQ$.</p> 
289.	<p>Find $m\angle PQR$.</p> 	290.	<p>Find $m\angle ABC$.</p> 
291.	<p>Find the values of x and y. Express your answers in simplest radical form.</p> 	292.	<p>Laura folded a triangular sheet of paper into the shape shown. Find $m\angle NLO$, given $m\angle LON = 50^\circ$, $m\angle ONP = 35^\circ$, and $m\angle NMP = 85^\circ$.</p> 
293.		294.	<p>Find the length of the line segment with endpoints $(-2, 5)$ and $(1, 11)$. Write your answer in the simplest radical form.</p>
295.	<p>Find $m\angle PQR$.</p> 	296.	<p>In the diagram below, $LJ = 520$ miles, $LG = 185$ miles and H is the midpoint of \overline{LJ}. Find GH.</p> 
297.	<p>Find the coordinates of the midpoint of PM with endpoints $P(4, 6)$ and $M(9, -4)$.</p>	298.	<p>Find the coordinates of the midpoint of AM with endpoints $A(1, 5)$ and $M(-3, 9)$.</p>
299.	<p>Find the length of the line segment with endpoints $(-2, 8)$ and $(4, 12)$. Write your answer in the simplest radical form.</p>	300.	<p>G is the midpoint of \overline{FH}. G has coordinates $(4, 1)$ and H has coordinates $(3, 6)$. What are the coordinates of F?</p>
301.	<p>What is $m\angle BGU$?</p> 	302.	<p>Frank folded a triangular sheet of paper into the shape shown. Find $m\angle RAW$, given $m\angle LCR = 85^\circ$, $m\angle CRL = 55^\circ$, and $m\angle ARW = 80^\circ$.</p> 
303.	<p>$m\angle ABD = 107^\circ$ and $m\angle CBD = 49^\circ$. Find $m\angle ABC$.</p> 	304.	<p>$m\angle PQR = 82^\circ$ and $m\angle RQS = 91^\circ$. Find $m\angle PQS$.</p> 

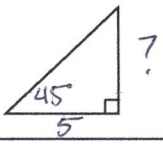
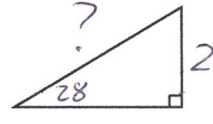
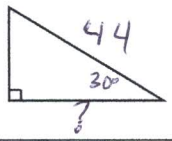
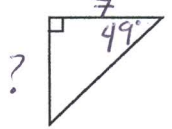
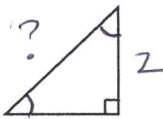
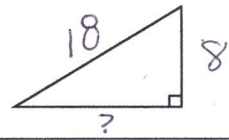
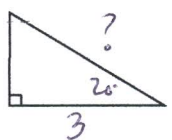
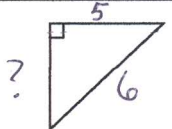
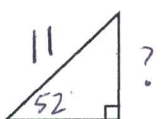
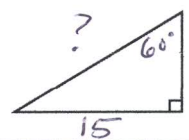
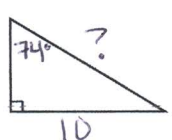
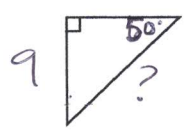
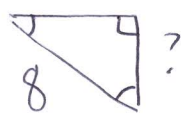
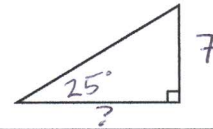
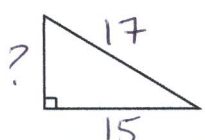
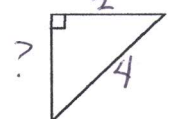
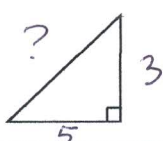
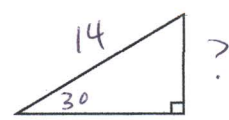
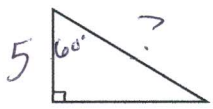
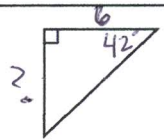
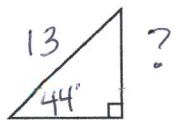
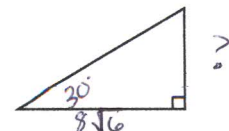
305.	<p>In the diagram below, $RC = 450$ miles, $VC = 50$ miles, and A is the midpoint of \overline{RV}. Find AV.</p> 	306.	<p>Find $m\angle DCF$.</p> 
307.	<p>Find $m\angle LMN$.</p> 	308.	<p>Identify the angle that is same side interior to $\angle 4$.</p> 
309.	<p>Find $m\angle NPQ$.</p> 	310.	<p>What postulate or theorem, if any, can be used to prove that $\triangle KNL \cong \triangle MNL$?</p> 
311.	<p>Simone folded a triangular sheet of paper into the shape shown. Find $m\angle LHI$.</p> 	312.	<p>What is $m\angle NMR$?</p> 
313.	<p>Given that $\triangle PQR \cong \triangle TSR$, $m\angle P = 48^\circ$, and $m\angle S = 94^\circ$, find $m\angle PRQ$.</p> 	314.	<p>What postulate or theorem will prove that $\triangle STW \cong \triangle VTW$?</p> 
315.	<p>Determine $m\angle Z$.</p> 	316.	<p>Determine the value of x.</p> 
317.		318.	<p>$\triangle DEF \sim \triangle LMN$. If the similarity ratio is $\frac{5}{3}$, what is MN?</p> 
319.	<p>Write the trigonometric ratio and solve for x.</p> 	320.	<p>Write the trigonometric ratio and solve for x.</p> 
321.	<p>Approximately how long is the building's shadow (round to the nearest tenth)?</p> 	322.	<p>Approximately how long is the tree's shadow (round to the nearest tenth)?</p> 

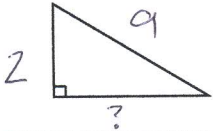
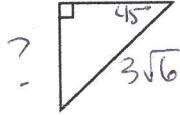
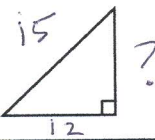
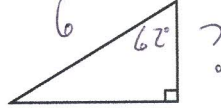
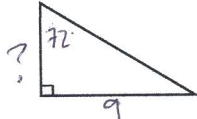
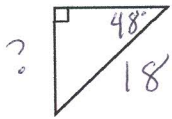
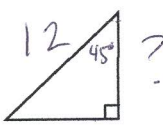
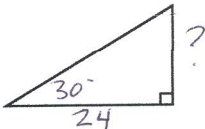
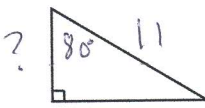
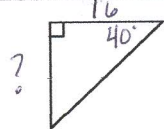
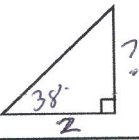
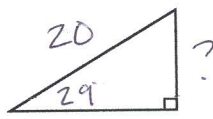
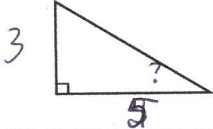
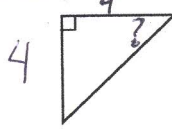
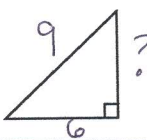
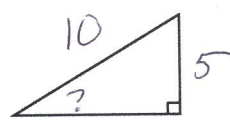
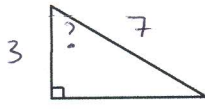
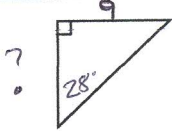
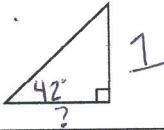
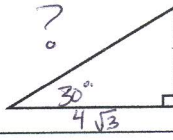
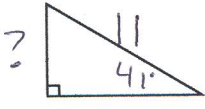
<p>323. A ranger spots a fire from the top of a watchtower that is 300 ft tall. If the angle of depression from the top of the watchtower to the fire is 39°, what is the horizontal distance between them? Round to the nearest foot.</p> 	<p>324. A man spots the plane from the ground at an angle of elevation of 43°. If the plane is traveling at an altitude of 2500 ft, what is the horizontal distance between the man and the plane? Round to the nearest foot.</p> 
<p>325. Determine the length of PR. Round to the nearest hundredth.</p> 	<p>326. Determine the length of TV. Round to the nearest hundredth.</p> 
<p>327. In the given triangle, $AB = 6$ and $BC = 4$.</p>  <p>Determine $\tan B$.</p>	<p>328. In the given triangle, $PQ = 2$ and $QR = 5$.</p>  <p>Determine $\sin R$.</p>
<p>329. $EF = ?$</p> 	<p>330. 331. $x = ?$</p> 
<p>332. Determine $m\angle ABC$.</p> 	<p>333. 334. Determine $m\angle DBE$.</p> 
<p>335. $\angle 1$ and $\angle 2$ are vertical angles. $m\angle 1 = (8x + 9)^\circ$, $m\angle 2 = (13x - 16)^\circ$. $m\angle 1 = ?$</p>	<p>336. $\angle 3$ and $\angle 4$ are a linear pair. $m\angle 3 = (12x + 17)^\circ$, $m\angle 4 = (3x + 13)^\circ$. $m\angle 4 = ?$</p>
<p>337. $m\angle PML = ?$</p> 	<p>338. $QR = ?$</p> 
<p>339. B is in the interior of $\angle ACD$. $m\angle ACB = (5x + 10)^\circ$, $m\angle ACD = (12x - 20)^\circ$, and $m\angle BCD = (3x - 2)^\circ$. $m\angle ACD = ?$</p>	<p>340. R is on \overline{QS}. $RS = 6x - 2$, $QS = 9x - 11$, and $QR = x + 3$. $RS = ?$</p>
<p>341. M is the midpoint of \overline{DE}. $ME = 8x + 4$, and $DM = 9x - 5$. $DE = ?$</p>	<p>342. \overrightarrow{HJ} bisects $\angle GHK$. $m\angle GHJ = (3x - 5)^\circ$, and $m\angle GHK = (4x + 14)^\circ$. $m\angle JHK = ?$</p>
<p>343. \overrightarrow{FG} bisects $\angle EFH$. $m\angle EFG = (14x + 7)^\circ$, and $m\angle GFH = (9x + 12)^\circ$. $m\angle EFH = ?$</p>	<p>344. L is the midpoint of \overline{KM}. $KL = 8x + 1$, and $KM = 15x + 8$. $LM = ?$</p>
<p>345. $\angle 3$ and $\angle 5$ are complementary angles. $m\angle 3 = (3x + 20)^\circ$, and $m\angle 5 = (5x + 6)^\circ$. $m\angle 3 = ?$</p>	<p>346. $\angle PQR \cong \angle ABC$. $m\angle PQR = (7x - 9)^\circ$, $m\angle LMN = (2x + 24)^\circ$, and $m\angle ABC = (5x + 3)^\circ$. $m\angle LMN = ?$</p>
<p>347. $EF = ?$</p> 	<p>348. $m\angle 4 = (8x + 2)^\circ$, and $m\angle 2 = (6x + 10)^\circ$. $m\angle 4 = ?$</p> 

349.	N is the midpoint of \overline{MP} . $MN = 3x + 7$ and $NP = 5x - 9$. $MP = ?$	350.	\overline{AB} goes through $\angle CAD$. $m\angle CAB = (9x + 7)^\circ$, $m\angle CAD = (14x - 1)^\circ$, and $m\angle BAD = (2x + 4)^\circ$. $m\angle CAD = ?$
351.	\overline{ST} bisects $\angle RSV$. $m\angle TSV = (4x + 8)^\circ$ and $m\angle RSV = (10x - 2)^\circ$. $m\angle RST = ?$	352.	$\angle 1$ and $\angle 2$ are supplementary angles. $m\angle 1 = (6x + 25)^\circ$ and $m\angle 2 = (9x + 5)^\circ$. $m\angle 1 = ?$
353.	$\angle 5$ and $\angle 6$ are complementary angles. $m\angle 5 = (3x + 2)^\circ$ and $m\angle 6 = (4x + 4)^\circ$. $m\angle 6 = ?$	354.	B is on \overline{AC} . $AC = 13x - 4$, $BC = 8x + 9$, and $AB = 2x + 8$. $BC = ?$
355.	$m\angle 5 = (15x - 7)^\circ$, and $m\angle 6 = (10x - 13)^\circ$. $m\angle 5 = ?$ 	356.	$m\angle 5 = (20x + 9)^\circ$, and $m\angle 3 = (17x + 24)^\circ$. $m\angle 3 = ?$ 
357.	$m\angle 1 = (12x + 8)^\circ$, and $m\angle 5 = (10x + 26)^\circ$. $m\angle 1 = ?$ 	358.	$m\angle 5 = (6x + 18)^\circ$, and $m\angle 4 = (2x + 2)^\circ$. $m\angle 5 = ?$ 
359.	Use slope to determine if \overline{AB} & \overline{CD} are parallel, perpendicular, or neither. $A(6, 2)$, $B(-3, 17)$, $C(2, 4)$ & $D(5, 9)$.	360.	$m\angle 2 = (13x - 3)^\circ$, and $m\angle 8 = (9x + 13)^\circ$. $m\angle 2 = ?$ 
361.	Determine the midpoint of $(7, -2)$ & $(4, 8)$.	362.	Determine the distance between $(2, 9)$ & $(7, -3)$.
363.	$CD = ?$ 	364.	$m\angle Q = ?$ 
365.	$m\angle DBE = ?$ 	366.	Determine $m\angle LMN$. 
367.	\overline{BD} goes through $\angle ABC$. $m\angle ABC = (11x - 5)^\circ$, $m\angle DBC = (5x + 1)^\circ$, and $m\angle ABD = (3x + 6)^\circ$. $m\angle DBC = ?$	368.	G is the midpoint of \overline{FH} . $FH = 9x + 5$ and $GH = 2x + 15$. $FG = ?$
369.	$m\angle ABC = ?$ 	370.	$m\angle DEF = ?$ 
371.	Determine the midpoint of \overline{PQ} . $P(-5, 4)$ & $Q(-8, 18)$	372.	$\angle 2$ and $\angle 3$ are complementary angles. $m\angle 2 = (16x + 1)^\circ$, $m\angle 3 = (14x + 29)^\circ$. $m\angle 3 = ?$
373.	Which property makes the triangles congruent? If they are not congruent, write "none." * 	374.	Which property makes the triangles congruent? If they are not congruent, write "none." 
375.	$\triangle ABC \cong \triangle DEF$. Determine $m\angle B$. 	376.	Which property makes the triangles similar? If they are not similar, write "none." 

377.	$\triangle LMN \cong \triangle PQR$. $LM = 3x + 4$, $MN = 7x + 2$, $LN = 5x + 3$, and $QR = 12x - 13$. $QR = ?$	378.	$\triangle ABC \sim \triangle DEF$. If the similarity ratio is $\frac{5}{4}$, then $DE = ?$
379.	$\triangle ABC \sim \triangle DEF$. $DF = ?$	380.	$CD = ?$
381.	$x = ?$	382.	Determine $m\angle ABE$.
383.	Determine $m\angle CBD$.	384.	$m\angle LMN = ?$
385.	$\angle 3$ and $\angle 4$ are vertical angles. $m\angle 3 = (18x - 7)^\circ$, $m\angle 4 = (16x + 1)^\circ$. $m\angle 3 = ?$	386.	$\angle 1$ and $\angle 2$ are a linear pair. $m\angle 1 = (3x + 21)^\circ$, $m\angle 2 = (4x + 12)^\circ$. $m\angle 2 = ?$
387.	$RS = ?$	388.	P is in the interior of $\angle LMN$. $m\angle LMN = (14x + 22)^\circ$, $m\angle LMP = (7x + 5)^\circ$, and $m\angle PMN = (9x - 5)^\circ$. $m\angle LMP = ?$
389.	B is on \overline{AC} . $AC = 13x - 9$, $AB = 5x - 7$, and $BC = 3x + 8$. $AB = ?$	390.	M is the midpoint of \overline{DE} . $DE = 16x - 8$, and $ME = 7x + 6$. $DM = ?$
391.	\overline{MN} bisects $\angle LMP$. $m\angle LMN = (5x + 31)^\circ$, and $m\angle NMP = (13x + 23)^\circ$. $m\angle LMP = ?$	392.	\overline{TV} bisects $\angle STU$. $m\angle STU = (8x + 6)^\circ$, and $m\angle STV = (6x - 9)^\circ$. $m\angle VTU = ?$
393.	L is the midpoint of \overline{EK} . $EL = 5x - 4$, and $LK = 7x - 8$. $EK = ?$	394.	$\angle 6$ and $\angle 9$ are supplementary angles. $m\angle 6 = (2x + 16)^\circ$, and $m\angle 9 = (7x - 7)^\circ$. $m\angle 9 = ?$
395.	$m\angle GHI = ?$	396.	
397.	$\overline{RS} \cong \overline{TV}$. $PQ = 8x - 3$, $RS = 10x + 6$, and $TV = 6x + 14$. $PQ = ?$	398.	R is on \overline{QS} . $QR = 6x + 3$, $QS = 15x + 7$, and $RS = 7x + 8$. $QS = ?$
399.	E is the midpoint of \overline{DF} . $DE = 12x + 1$ and $EF = 9x + 10$. $DF = ?$	400.	\overline{DE} goes through $\angle CDF$. $m\angle CDF = (3x + 22)^\circ$, $m\angle CDE = (4x + 5)^\circ$, and $m\angle EDF = (x + 13)^\circ$. $m\angle CDE = ?$
401.	\overline{MN} bisects $\angle LMP$. $m\angle LMP = (7x + 19)^\circ$ and $m\angle NMP = (2x + 11)^\circ$. $m\angle LMN = ?$	402.	$\angle 3$ and $\angle 4$ are complementary angles. $m\angle 3 = (2x + 7)^\circ$ and $m\angle 4 = (3x + 8)^\circ$. $m\angle 3 = ?$
403.	$m\angle 5 = (11x + 10)^\circ$, and $m\angle 7 = (8x + 43)^\circ$. $m\angle 5 = ?$	404.	$m\angle 1 = (17x - 7)^\circ$, and $m\angle 7 = (18x - 16)^\circ$. $m\angle 7 = ?$
405.	$m\angle 1 = (16x - 10)^\circ$, and $m\angle 4 = (14x + 40)^\circ$. $m\angle 4 = ?$	406.	$m\angle 3 = (8x + 27)^\circ$, and $m\angle 6 = (6x + 13)^\circ$. $m\angle 3 = ?$

<p>407. $m\angle 1 = (10x + 37)^\circ$, and $m\angle 7 = (14x - 7)^\circ$. $m\angle 7 = ?$</p> 	<p>408. $m\angle 4 = (6x - 10)^\circ$, and $m\angle 8 = (3x + 14)^\circ$. $m\angle 4 = ?$</p> 
<p>409. $\angle 7$ and $\angle 8$ are supplementary angles. $m\angle 7 = (12x - 13)^\circ$ and $m\angle 8 = (8x + 33)^\circ$. $m\angle 8 = ?$</p>	<p>410. Use slope to determine if \overline{AB} & \overline{CD} are parallel, perpendicular, or neither. $A(-1, 6), B(6, 8), C(5, 0)$ & $D(3, 7)$.</p>
<p>411. Determine the midpoint of $(5, 3)$ & $(-7, 6)$.</p>	<p>412. Determine the distance between $(6, 5)$ & $(2, 8)$.</p>
<p>413. $EF = ?$</p> 	<p>414. $m\angle R = ?$</p> 
<p>415. $m\angle DBE = ?$</p> 	<p>416. $\angle 6$ and $\angle 7$ are complementary angles. $m\angle 6 = (13x - 4)^\circ$, $m\angle 7 = (9x + 6)^\circ$. $m\angle 6 = ?$</p>
<p>417. C is on \overline{BD}. $BC = 6x - 4$, $BD = 10x - 6$, and $CD = 2x + 8$. $BD = ?$</p>	<p>418. \overline{DE} bisects $\angle CDF$. $m\angle CDE = (7x - 3)^\circ$ and $m\angle CDF = (12x + 10)^\circ$. $m\angle EDF = ?$</p>
<p>419. $m\angle ABC = ?$</p> 	<p>420. $m\angle DEF = ?$</p> 
<p>421. Determine $m\angle LMN$.</p> 	<p>422. * Which property makes the triangles congruent? If they are not congruent, write "none."</p> 
<p>423. $\triangle ABC \cong \triangle DEF$. Determine $m\angle B$.</p> 	<p>424. Which property makes the triangles similar? If they are not similar, write "none."</p> 
<p>425. $\triangle ABC \sim \triangle DEF$. $BC = ?$</p> 	<p>426. $\triangle ABC \sim \triangle DEF$. If the similarity ratio is $\frac{2}{3}$, then $BC = ?$</p> 
<p>427.</p> 	<p>428.</p> 
<p>429.</p> 	<p>430.</p> 
<p>431.</p> 	<p>432.</p> 

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