

Analytic Geometry

February 29, 2016

Test Review Congruent Triangles & Quadrilaterals

MCC9-12.G.CO.7 Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.

MCC9-12.G.CO.11 Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.



Oct 2-7:10 AM

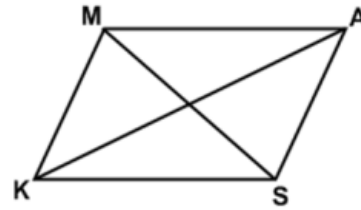
Put check marks in ALL the boxes that are appropriate.

- | | | | | | |
|-----|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1) | Opposite sides are parallel | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2) | Opposite sides are congruent | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3) | Opposite angles are congruent | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4) | Consecutive angles are supplementary | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5) | Diagonals bisect each other | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6) | Diagonals are congruent | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7) | Diagonals are perpendicular | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8) | A diagonal bisects two angles | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9) | All angles are right angles | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10) | All sides are congruent | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Oct 6-1:39 PM

Use parallelogram MASK to answer questions 11 – 14.

11) If $MK=5x-10$ and $SA = 7x-18$, then $x =$ 4



12) Then the measure of $MK =$ 10

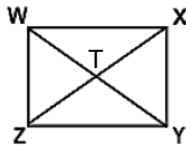
13) If $m\angle KMA = 3y+27$ and $m\angle MKS = 6y-45$, then $y =$ 22

14) Then, $m\angle KMA =$ 93

Oct 2-3:38 PM

Use recta

ver questions 15-19.



15) If $WY=37$, then $ZX =$ 37

16) If $ZX=52$, then $WT =$ 26

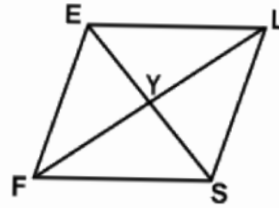
17) If $m\angle TWZ=65^\circ$, then $m\angle TZW =$ 65°

18) and $m\angle WTZ =$ 50°

19) If $WY = 4a + 18$ and $TW = 3a - 4$, then
 $a =$ 13

Apr 14 - 3:38 AM

Use rhombus ELSF for qu



20) $m\angle EYF = \underline{90^\circ}$

21) If $EF=37$, then $EL = \underline{37}$

22) If $LF=48$, then $LY = \underline{24}$

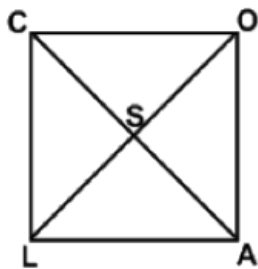
23) If $m\angle ESF=54^\circ$, then $m\angle SEF = \underline{54^\circ}$

24) If $m\angle ELS=5x-1$, and $m\angle FLS=2x+8$,
then $x = \underline{17}$.

25) If $m\angle LEF = 2y+24$ and $m\angle ELS=3y-14$,
then $y = \underline{38}$.

Sep 28-8:16 PM

Use square questions 26-28.



26) If $LC=13$, then $LA = \underline{13}$ and $AO = \underline{13}$

27) If $CA=17$, then $LO = \underline{17}$ and $LS = \underline{8.5}$

28) $m\angle ACO = \underline{45^\circ}$ and $m\angle CLA = \underline{90^\circ}$

Sep 28-8:24 PM

Use isosceles trapezoid FGHI

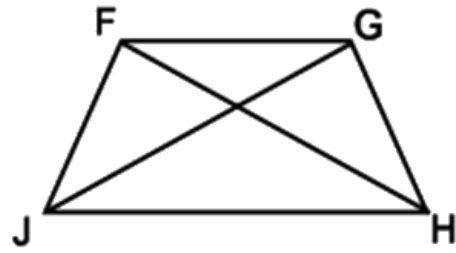
29) If $FJ=22$, then $GH = \underline{22}$

30) If $JG = 28$, then $FH = \underline{28}$

31) If $m\angle JFG = 98$, then $m\angle FGH = \underline{98}$

32) If $m\angle GHJ = 84^\circ$, then $m\angle FJH = \underline{84^\circ}$

33) If $m\angle FJH = 82$, $m\angle JFG = \underline{98^\circ}$



Oct 2-4:50 PM

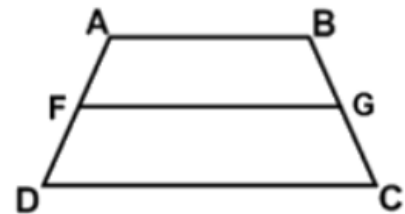
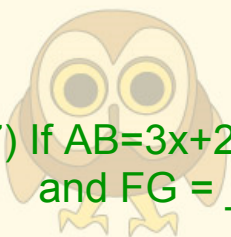
Use isosceles trapezoid ABCD for problem

34) If $AF=8$, then $BG = \underline{8}$

35) If $AB=24$, then $DC=36$, then $FG = \underline{30}$

36) If $AB=14$ and $FG=22$, then $DC = \underline{30}$

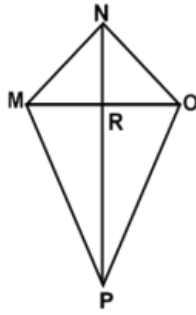
37) If $AB=3x+2$, $FG=4x-2$, and $DC=34$, then $x = \underline{8}$
and $FG = \underline{30}$



Oct 2-5:04 PM

Use kite MI

blems 38-44.



38) If $MN=15$, then $NO = \underline{15}$. 39) If $OP=26$, then $MP = \underline{26}$.

40) If $MR=12$, then $RO = \underline{12}$. 41) $m\angle NRO = \underline{90^\circ}$.

42) If $m\angle MNO = 88^\circ$, then $m\angle MNR = \underline{44}$.

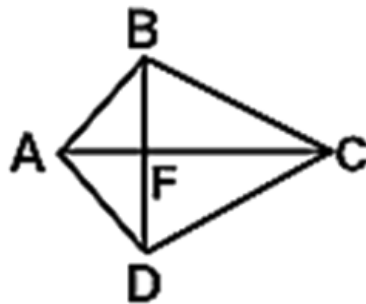
43) If $m\angle NMP = 96^\circ$, then $m\angle NOP = \underline{96^\circ}$.

44) $m\angle MPO = 82^\circ$, then $m\angle ROP = \underline{49^\circ}$.

Oct 2-5:13 PM

Use

blems 45-46.



45) If $AD=15$ and $AF=9$, then $FD = \underline{12}$ and $FB = \underline{12}$.

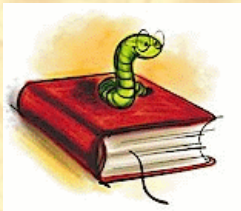
46) If $FD=10$ and $FC=24$, then $DC = \underline{26}$.

Oct 2-5:19 PM

47) What type of quadrilateral has the vertices $A(-10,4)$, $B(-2, 10)$, $C(4,2)$, $D(-4,-4)$?



Feb 26-10:48 AM



**Study
for your
Test!**

Oct 6-4:26 PM