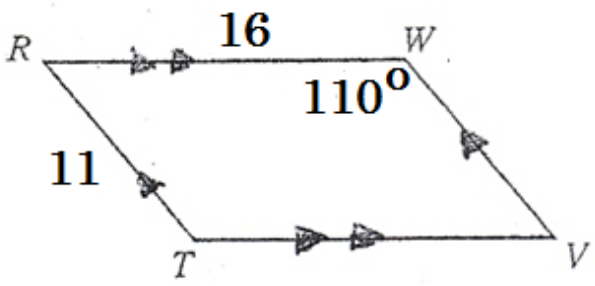
**ANSWERS**

DIRECTIONS: For # 1-11, find the measure of each angle or the length of each segment in the following parallelograms.



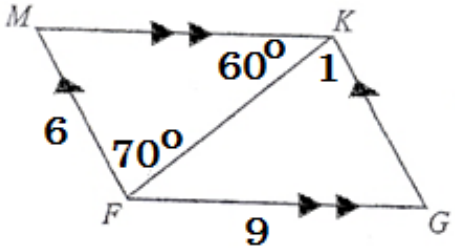

**1.** $m\measuredangle R =$ **70°**

**2.** $WV =$ **11**

**3.** $m\measuredangle T =$ **110°**

**4.** $m\measuredangle V =$ **70°**

**5.** $VT =$ **16**




**6.** $m\measuredangle M =$ **50°**

**7.** $m\measuredangle 1 =$ **70°**

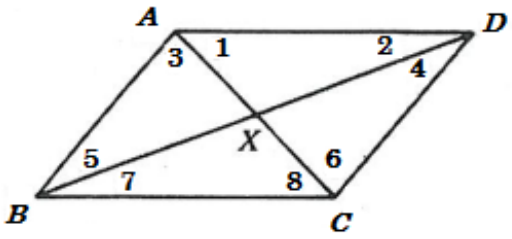
**8.** $KG =$ **6**

**9.** $m\measuredangle GFM =$ **130°**

**10.** $MK =$ **9**

**11.** $m\measuredangle G =$ **50°**

DIRECTIONS: For # 12- 17, accurately complete each statement about parallelogram $ABCD$. Your answers will be other segments, angles, and triangles (not numeric values)




**12.** $\overline{AD} \cong$ **$\overline{BC}$**

**13.** $\measuredangle DAB \cong$ **$\measuredangle BCD$**

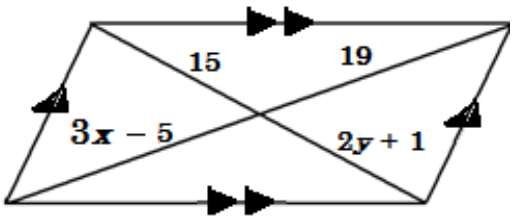
**14.** $\overline{BX} \cong$ **$\overline{XD}$**

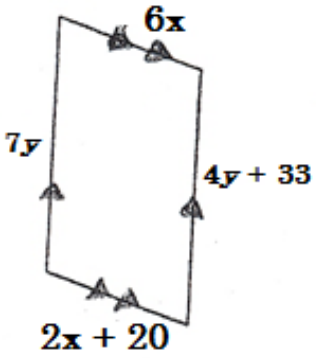
**15.** $\measuredangle 1 \cong$ **$\measuredangle 8$**

**16.** $\measuredangle ABC$ is supplementary to **$\measuredangle BCD$**

**17.** $\Delta ACB \cong$ **$\Delta CAD$**

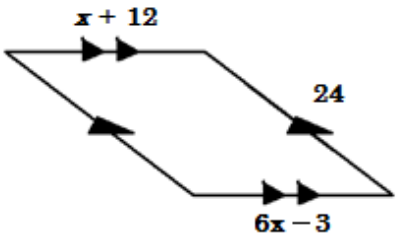
DIRECTIONS: For # 18- 22, use the accompanying diagrams to solve for $x$ and $y$. SHOW WORK.

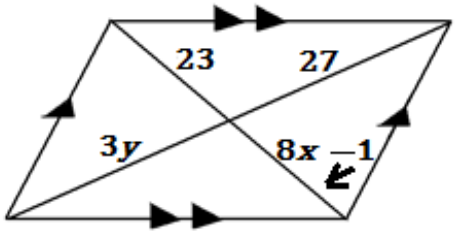



**18.** $x$ = **8** $y$ = **7**

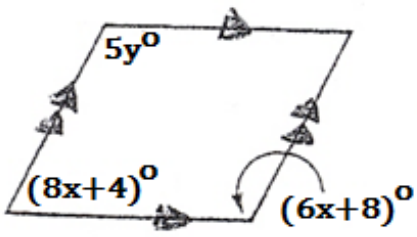
**19.** $x$ = **5** $y$ = **11**



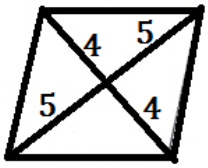

**20.** $x = 3$

**21.** $x = 3$ $y = 9$

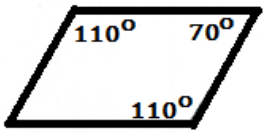



**22.** $x = 12$ $y = 16$

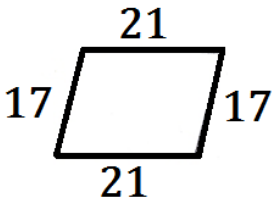
DIRECTIONS: For #23-28, circle exactly one response (YES or NO) to indicate that there is or isn't enough information in the diagrams to conclude that the quadrilaterals are parallelograms.



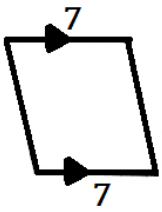

**23.** **YES** or NO



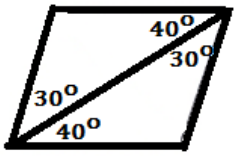

**24.** **YES** or NO



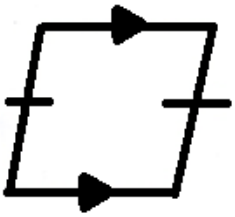

**25.** **YES** or NO




**26.** **YES** or NO

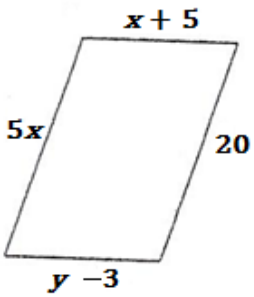


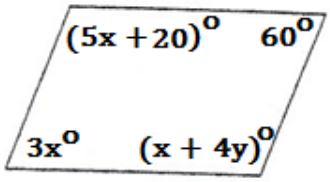

**27.** **YES** or NO



**28.** YES or **NO**

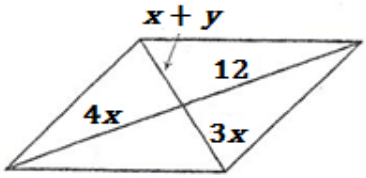
DIRECTIONS: For #29-31, find the values of $x$ and $y$ that will make the polygons be parallelograms. SHOW WORK.



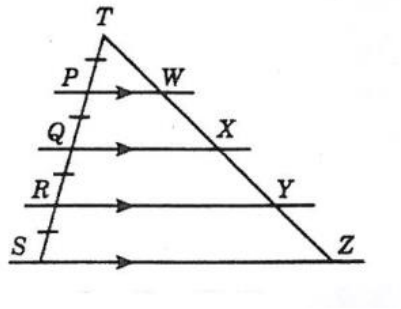

**29.** $x$ = **4** $y$ = **12**

**30.** $x$ = **20** $y$ = **25**




**31.** $x$ = **3** $y$ = **6**

DIRECTIONS: For #32-34, use the following diagram to accurately complete the statements. In this diagram, $= QR = RS$ .

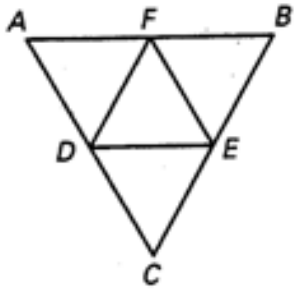



**32.** If $YZ = 12$, then $XY =$ **12**

**33.** If $WZ = 42$, then $WX =$ **14**

**34.** If $QX = 18$, then $PW =$ **9**

DIRECTIONS: For # 35-37, use the following diagram to accurately complete the following statements. The midpoints of the sides of $\Delta ABC$ are $F$, $E$, and $D$.




**35.** $\overline{FE}$ || $\overline{AC}$

**36.** If $CB = 50$, then $DF =$ **25**

**37.** If $DE = 19$, then $AB =$ **38**