

Geometry Ch. 3 review

Quiz 3.5-3.6 today (There is at least one construction)

Test Ch. 3 is Mon. (There is at least one construction)

Poetry project due Mon. EOD

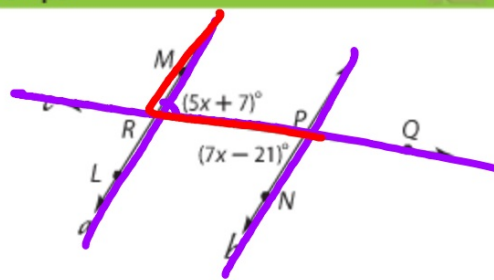
whiteboards

Standardized Test Example 2 Use Angle Relationships



OPEN ENDED Find $m\angle MRQ$ so that $a \parallel b$.
Show your work.

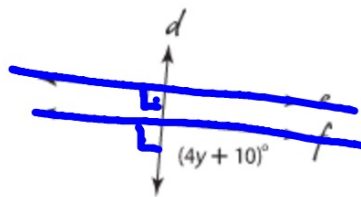
$$\begin{aligned} 5x + 7 &= 7x - 21 \\ -5x + 21 &-5x + 21 \\ \hline 28 &= 2x \\ \frac{28}{2} &= \frac{2x}{2} \\ x &= 14 \end{aligned}$$



$$\begin{aligned} 5(14) + 7 \\ 70 + 7 \\ 77^\circ \end{aligned}$$

Guided Practice

2. Find y so that $e \parallel f$. Show your work.



$$90 + 4y + 10 = 180$$

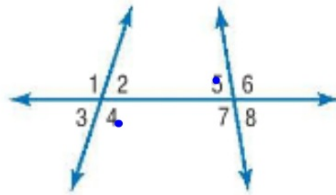
$$4y + 100 = 180$$

$$\begin{array}{r} 4y + 100 = 180 \\ -100 \quad -100 \\ \hline 4y = 80 \end{array}$$

$$\frac{4y}{4} = \frac{80}{4} \quad y = 20$$

Classify the relationship between each pair of angles as *alternate interior*, *alternate exterior*, *corresponding*, or *consecutive interior* angles.

1. $\angle 6$ and $\angle 3$ **AEA**
2. $\angle 4$ and $\angle 7$ **CIA**
3. $\angle 5$ and $\angle 4$ **AIA**



Determine the slope of the line that contains the given points.

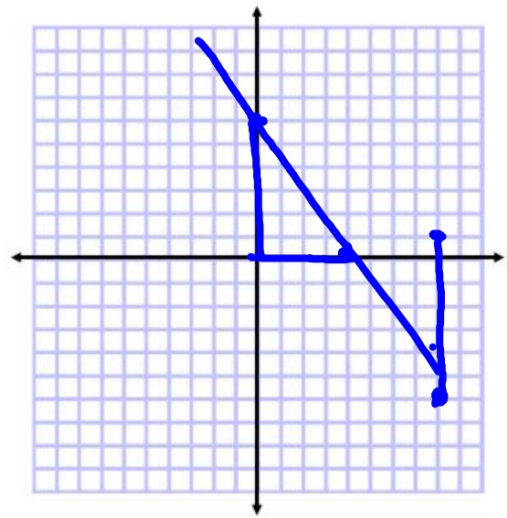
4. $G(8, 1), H(8, -6)$

5. $A(0, 6), B(4, 0)$

$$m = \frac{7}{0}$$

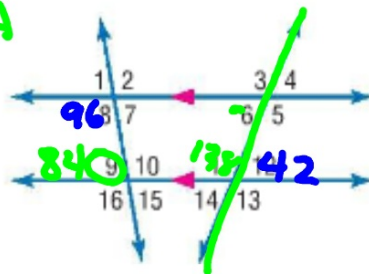
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$$-\frac{6}{4} = -\frac{3}{2}$$

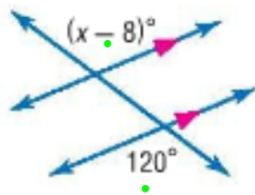


In the figure, $m\angle 8 = 96$ and $m\angle 12 = 42$. Find the measure of each angle. Tell which postulate(s) or theorem(s) you used.

8. $\angle 9$ $x + 96 = 180$ CIA
 9. $\angle 11$ $x + 42 = 180$ LP
 10. $\angle 6$ 42 AIA
 42 CIA

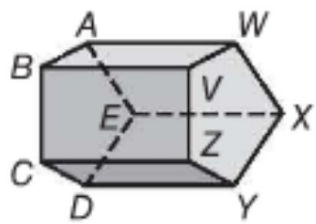


11. Find the value of x in the figure below.



$$\begin{aligned}x - 8 &= 120 \\+ 8 & \quad + 8 \\x &= 128\end{aligned}$$

18. **MULTIPLE CHOICE** Which segment is skew to \overline{CD} ?



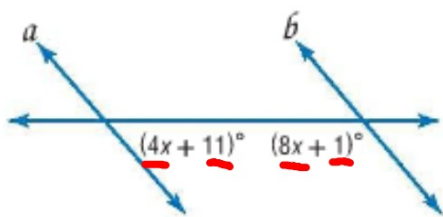
~~A \overline{ZY}~~

~~B \overline{AB}~~

~~C \overline{DE}~~

D \overline{VZ}

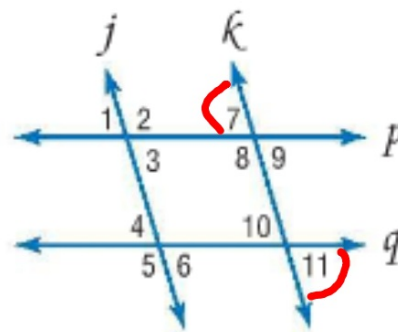
19. Find x so that $a \parallel b$. Identify the postulate or theorem you used.



$$\begin{array}{r} 12x + 12 = 180 \\ -12 \quad -12 \\ \hline 12x = 168 \\ x = 14 \end{array}$$

Given the following information, determine which lines, if any, are parallel. State the postulate or theorem that justifies your answer.

22. $\angle 4 \cong \angle 10$ CA
23. $\angle 9 \cong \angle 6$ none
24. $\angle 7 \cong \angle 11$ AEA



Write equations of parallel lines

Write equations of perpendicular lines

Slope-intercept form

Point-slope form