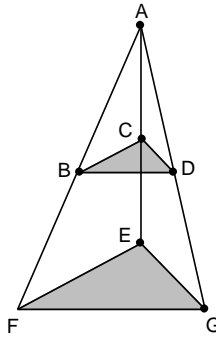


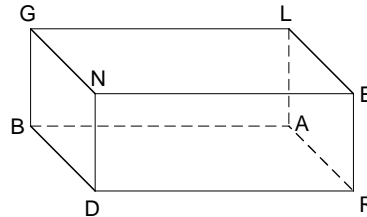
Parallel, Perpendicular, and Skew Lines

1. Are \overline{BD} and \overline{AG} coplanar? _____
2. The intersection of \overline{BD} and \overline{AG} is _____.



Use the figure to the right.

3. Name a pair of parallel segments. _____
4. Name a segment that is skew to \overline{GN} _____
5. What plane is parallel to plane GBA? _____

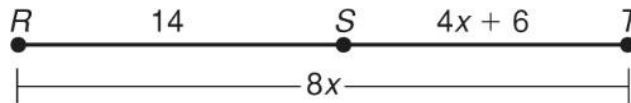


Segment and Angle Addition Postulate

6. G is between F and H, $FG = 6$ and $FH = 11$. Find GH. (Hint: Draw a Diagram)

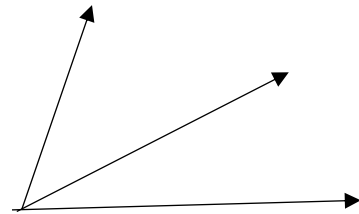
7. What is the measure of \overline{RT} ?

- | | |
|------|------|
| A 5 | C 26 |
| B 16 | D 40 |

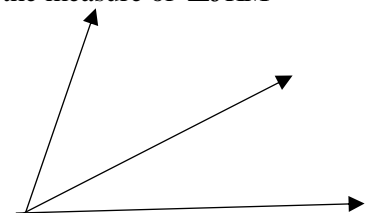


8. E is the midpoint of \overline{DF} . $DF = 2x - 2$ and $DE = 3x - 11$. Find EF. (Hint: Draw a Diagram)

9. T is in the interior of $\angle PQR$. Find the $m\angle PQR$ if $m\angle PQR = (10x - 7)^\circ$, $m\angle RQT = (5x)^\circ$ and $m\angle PQT = (4x + 6)^\circ$.



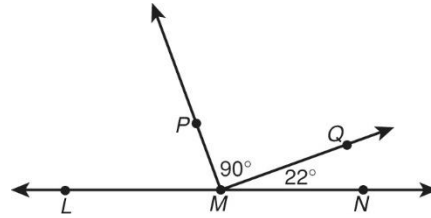
10. \overline{KM} bisects $\angle JKL$, $m\angle JKM = (4x + 6)^\circ$, and $m\angle MKL = (7x - 12)^\circ$. Find the measure of $\angle JKM$



Types of Angles and Angle Relationships

11. Which term describes $\angle PMQ$?

- A obtuse C right
 B straight D acute



12. What is $m\angle PMN$?

- F 22° H 68°
 G 90° J 112°

13. How are line m and line s related?

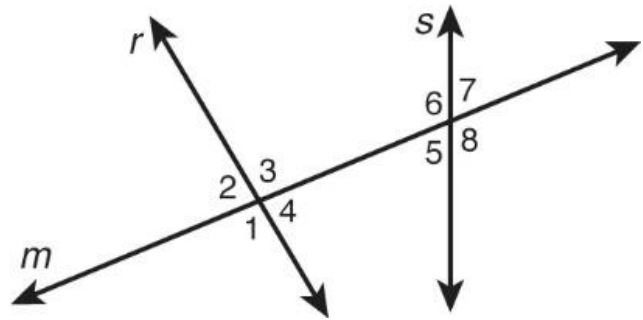
- A intersecting C perpendicular
 B parallel D skew

14. Identify the transversal.

- A line m B line s

15. What type of angle pair are $\angle 3$ and $\angle 5$?

- A alternate interior angles
 B corresponding angles
 C alternate exterior angles
 D same-side interior angles

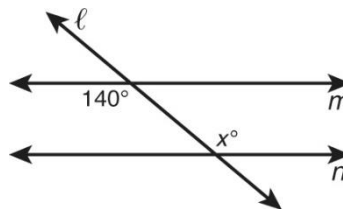


16. Which correctly completes the sentence? If two parallel lines are cut by a transversal, then the pairs of corresponding angles are _____.

- A complementary
 B congruent

17. Which value of x makes lines m and n parallel?

- A 40° B 140°



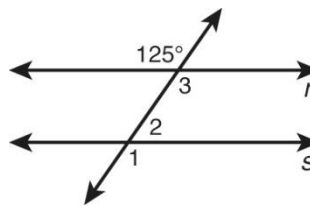
18. Two angles are complementary; one angle is 3 times the measure of the other. What is the measure of the smaller angle?

19. Given $r \parallel s$, what is the measure of $\angle 1$?

- A 55° B 125°

20. Given $r \parallel s$, which angle is supplementary to $\angle 3$?

- A $\angle 1$ B $\angle 2$



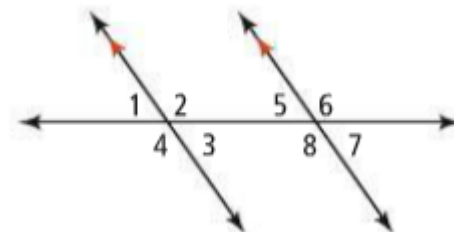
21. If $m\angle 4 = 52^\circ$, find...

a. $m\angle 2 =$ _____

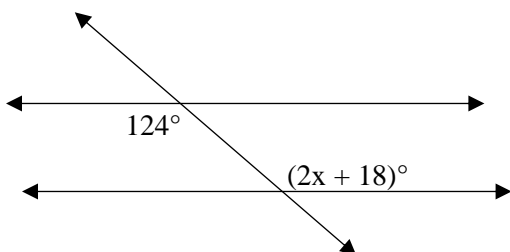
c. $m\angle 8 =$ _____

b. $m\angle 7 =$ _____

d. $m\angle 1 =$ _____

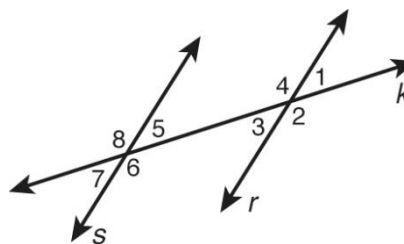


22. Determine the value of x to prove $a \parallel b$. Explain your reasoning.



23. Which information proves that $r \parallel s$?

- F $\angle 1 \cong \angle 3$ H $\angle 4 \cong \angle 6$
 G $\angle 4 \cong \angle 5$ J $\angle 5 \cong \angle 6$



24. If $m\angle 3 = (4x + 20)^\circ$ and $m\angle 5 = (6x + 10)^\circ$,

what value of x proves that $r \parallel s$?

- A 5 C 40
 B 15 D 100

Writing Equations of Lines

25. What is the slope of the line through $(3, 6)$ and $(4, 2)$?

- A -4 C $\frac{8}{7}$
 B $-\frac{1}{4}$ D 4

26. Which equation of the line has a slope of 3 and passes through (1, -3)?

- a.) $y = 3x$
- b.) $y = 3x - 9$
- c.) $y = 3x - 6$
- d.) $y = 3x + 6$
- e.) $y = 3x + 10$

27. Which of the following equations represents a line perpendicular to $y = \frac{1}{3}x$ that passes through (7, 5)?

- a.) $y = -3x + 16$
- b.) $y = 3x + 16$
- c.) $y = 3x + 26$
- d.) $y = -2x + 10$
- e.) $y = -3x + 26$

28. Find the slope of the line that passes through (2, 5) and (-1, 8).

- a.) -1
- b.) 1
- c.) 3
- d.) -3
- e.) 2

How do you feel about Unit 2?

What is the most challenging part?

What is the easiest part?

What can Miss P do to help make you feel GREAT before Friday's midterm?!