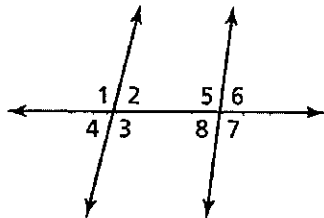


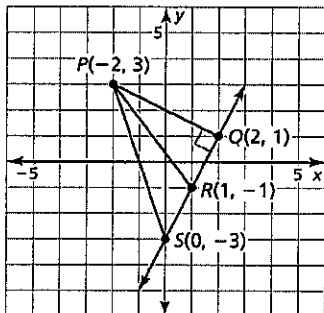
CHAPTER 3 PRACTICE TEST – OPTIONAL

1. Identify all pairs of angles of the given type.

- a. Alternate exterior
- b. Alternate interior
- c. Corresponding
- d. Consecutive interior



2. Find the shortest distance from point P to line QS.



3. Tell whether the lines through the given points are parallel, perpendicular, or neither. Justify your answer.

- a. **Line 1:** (2, 3), (4, 12)
Line 2: (5, 10), (14, 8)

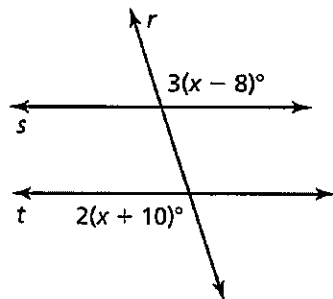
- b. **Line 1:** (-6, -10), (4, -2)
Line 2: (-8, -6), (0, 4)

4. Write the equation of the line passing through (2, -3) that is parallel to $y = -6x + 10$

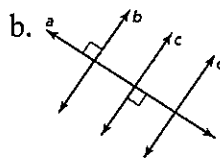
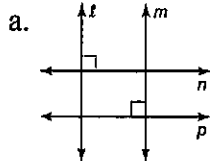
5. Write the equation of the line passing through (-10, -4) perpendicular to $5x - y = 6$

6. Write the equation of the line passing through (5, 7) perpendicular to $x = 3$

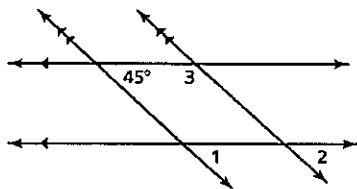
7. Find the value of x that makes line s parallel to line t .



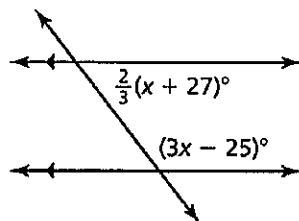
8. Determine which lines, if any, must be parallel.



9. Find the measures of angles 1, 2, and 3.

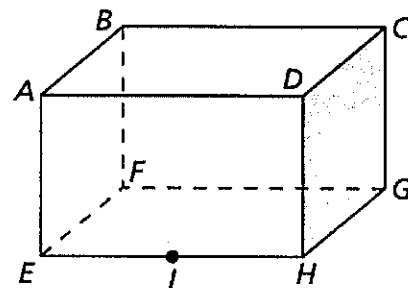


10. Find the value of x .



11. Think of each segment as part of a line. Which line(s) or plane(s) appear to fit the description?

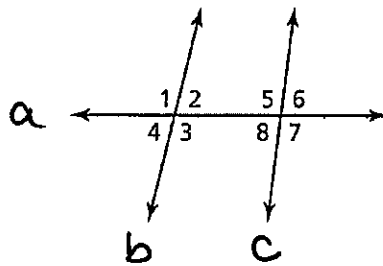
- Line(s) parallel to line GH and containing point F
- Line(s) skew to line GH and containing point F
- Line(s) perpendicular to line GH and containing point F
- Plane(s) parallel to plane GHD and containing point F



12. Fill in the flow chart proof. (There are two different proofs for this one! Try doing both ☺)

Given: $\angle 2$ is supplementary to $\angle 5$

Prove: $\angle 5 \cong \angle 3$



proof #1

$\angle 2$ is supp.
to $\angle 5$

given

if $\parallel \rightarrow$

proof #2

$\angle 2$ is supp
to $\angle 5$

$\cong$ supps thm

13. Find the measure of angle 1.

