

LESSON
3

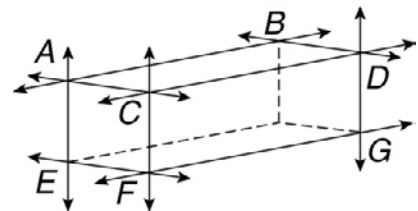
Geometric Figures

Practice A: Line and Angle Relationships

1. Draw a pair of parallel lines.
2. Draw a pair of perpendicular lines.

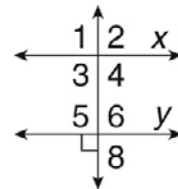
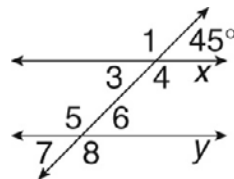
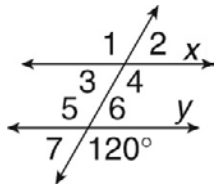
Tell whether each statement is true or false.

3. \overleftrightarrow{AC} and \overleftrightarrow{AB} appear parallel. _____
4. \overleftrightarrow{AC} and \overleftrightarrow{EF} appear parallel. _____
5. \overleftrightarrow{AB} and \overleftrightarrow{CD} appear perpendicular. _____
6. \overleftrightarrow{CF} and \overleftrightarrow{FG} appear perpendicular. _____
7. \overleftrightarrow{EF} and \overleftrightarrow{DG} appear to be skew. _____
8. \overleftrightarrow{CD} and \overleftrightarrow{DG} appear perpendicular. _____

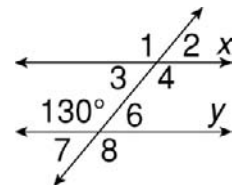
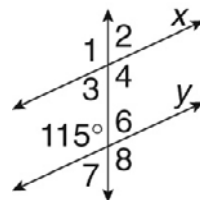
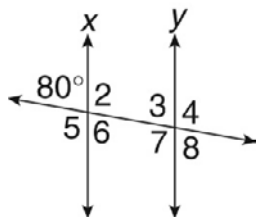


Line x is parallel to line y . Find the measure of each angle.

9. $\angle 1$ and $\angle 6$
10. $\angle 3$ and $\angle 7$
11. $\angle 1$ and $\angle 4$



12. $\angle 6$ and $\angle 4$
13. $\angle 6$ and $\angle 7$
14. $\angle 1$ and $\angle 3$



Problem Solving

- | | |
|---------------|----------------|
| 1. 55° | 2. 130° |
| 3. $\angle 6$ | 4. $\angle 5$ |
| 5. D | 6. G |
| 7. B | 8. H |

Reading Strategies


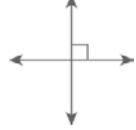
- a protractor
- under the hole in the middle of the protractor
- one of the two rays
- 90 degrees
- 120 degrees

Puzzles, Twisters & Teasers

- N
- S
- O
- T
- E
- U
- G
- R

S T U R G E O N

Answers for Lesson 3**Practice A**

- | | |
|--|--|
| 1.  | 2.  |
| 3. false | 4. true |
| 5. false | 6. true |
| 7. true | 8. true |
| 9. 120° and 60° | 10. 45° and 45° |
| 11. 90° and 90° | 12. 80° and 100° |
| 13. 65° and 65° | 14. 130° and 50° |

Practice B

- | | |
|------------------|------------------|
| 1. parallel | 2. perpendicular |
| 3. perpendicular | 4. skew |
| 5. perpendicular | 6. perpendicular |
| 7. skew | 8. parallel |

- | | |
|-------------------------------|---------------------------------|
| 9. 95° and 85° | 10. 117° and 117° |
| 11. 87° and 93° | 12. 122° and 58° |
| 13. 78° and 78° | 14. 107° and 73° |

Practice C

- | | |
|--|------------------------------|
| 1. parallel | 2. perpendicular |
| 3. skew | 4. parallel |
| 5. skew | 6. perpendicular |
| 7. 71° and 109° | 8. 52° and 52° |
| 9. 67° and 67° | |
| 10. 63° , 117° , and 117° | |
| 11. 85° , 85° , and 95° | |
| 12. 100° , 80° , and 80° | |
| 13. 90° | |

Review for Mastery

- | | |
|--|--|
| 1. parallel | 2. perpendicular |
| 3. skew | 4. $\angle 2$, $\angle 3$, $\angle 6$, $\angle 7$ |
| 5. $\angle 1$, $\angle 4$, $\angle 5$, $\angle 8$ | |
| 6. $m\angle 1 = 140^\circ$; $m\angle 2 = 40^\circ$ | |

Challenge

- | | |
|----------------|-----------------|
| 1. 55° | 2. 33° |
| 3. 92° | 4. 55° |
| 5. 55° | 6. 22° |
| 7. 45° | 8. 135° |
| 9. 135° | 10. 135° |
| 11. 45° | 12. 45° |

Problem Solving

- | | |
|----------------|---------------|
| 1. 105° | 2. 75° |
| 3. 75° | 4. 85° |
| 5. C | 6. F |
| 7. B | 8. F |
| 9. D | |

Reading Strategies

- Possible answer: \overline{AB} and \overline{CD}
- Possible answer: Parallel lines are the same distance apart and never meet.