

CHAPTER 15 Parallel Lines and Angles**EXERCISE 15a (p. 217)**

Can be used for discussion.

EXERCISE 15b (p. 219)

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|-------------|-------------|-------------|-------------|--------------|
| 1. <i>g</i> | 3. <i>d</i> | 5. <i>f</i> | 7. <i>d</i> | 9. <i>e</i> |
| 2. <i>e</i> | 4. <i>e</i> | 6. <i>f</i> | 8. <i>g</i> | 10. <i>d</i> |

EXERCISE 15d (p. 222)

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|----------------|---------------|----------------|-----------------|-----------------|
| 1. 60° | 4. 60° | 7. 110° | 9. 30° | 11. 130° |
| 2. 110° | 5. 60° | 8. 120° | 10. 130° | 12. 45° |
| 3. 75° | 6. 80° | | | |

EXERCISE 15e (p. 224)

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| 1. 50° | 9. $50^\circ, 45^\circ, 50^\circ$ | 17. 70° |
| 2. $130^\circ, 130^\circ, 50^\circ$ | 10. $55^\circ, 125^\circ, 55^\circ$ | 18. 60° |
| 3. $60^\circ, 60^\circ, 60^\circ, 120^\circ, 60^\circ$ | 11. $110^\circ, 70^\circ, 130^\circ, 130^\circ$ | 19. 135° |
| 4. $50^\circ, 80^\circ, 50^\circ$ | 12. $40^\circ, 100^\circ$ | 20. 55° |
| 5. $70^\circ, 80^\circ, 30^\circ$ | 13. 80° | 21. 55° |
| 6. $115^\circ, 115^\circ$ | 14. $90^\circ, 90^\circ, 50^\circ$ | 22. 120° |
| 7. $140^\circ, 40^\circ, 40^\circ$ | 15. 120° | 23. 120° |
| 8. $70^\circ, 110^\circ, 70^\circ, 70^\circ$ | 16. 40° | 24. 45° |

EXERCISE 15f (p. 227)

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|-------------|-------------|-------------|-------------|--------------|
| 1. <i>e</i> | 3. <i>d</i> | 5. <i>d</i> | 7. <i>g</i> | 9. <i>d</i> |
| 2. <i>e</i> | 4. <i>d</i> | 6. <i>g</i> | 8. <i>e</i> | 10. <i>g</i> |

EXERCISE 15g (p. 229)

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|--------------------------|------------------------------------|-------------------------|----------------|----------------|
| 1. $50^\circ, 130^\circ$ | 4. $260^\circ, 40^\circ, 60^\circ$ | 7. $55^\circ, 65^\circ$ | 9. 90° | 11. 30° |
| 2. $130^\circ, 50^\circ$ | 5. $70^\circ, 70^\circ, 70^\circ$ | 8. 60° | 10. 90° | 12. 45° |
| 3. $50^\circ, 70^\circ$ | 6. $45^\circ, 90^\circ$ | | | |

EXERCISE 15h (p. 230)

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|----------------|----------------|----------------|-------------------------------------|--------------------------------------|
| 1. <i>e, g</i> | 3. <i>e, g</i> | 5. <i>h, f</i> | 7. $70^\circ, 110^\circ, 180^\circ$ | 9. $40^\circ, 40^\circ, 80^\circ$ |
| 2. <i>e, d</i> | 4. <i>e, d</i> | 6. <i>d, g</i> | 8. $130^\circ, 50^\circ, 180^\circ$ | 10. $120^\circ, 60^\circ, 180^\circ$ |

EXERCISE 15i (p. 232)

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|--------------------------|------------------------------------|--------------------------|-------------------------------------|---|
| 1. 120° | 3. 85° | 5. $55^\circ, 125^\circ$ | 7. $80^\circ, 80^\circ$ | 9. $80^\circ, 100^\circ, 80^\circ, 100^\circ$ |
| 2. $130^\circ, 50^\circ$ | 4. $40^\circ, 100^\circ, 60^\circ$ | 6. 40° | 8. $130^\circ, 130^\circ, 50^\circ$ | 10. $70^\circ, 110^\circ$ |

EXERCISE 15j (p. 233)

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|----------------|----------------|---------------|---------------|-------------|
| 1. 65° | 3. 55° | 5. 70° | 7. 45° | 9. parallel |
| 2. 140° | 4. 110° | 6. 70° | 8. 75° | |

EXERCISE 15k (p. 234)

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|---------------|----------------|---------------|---------------|---------------|
| 1. 80° | 3. 110° | 5. 25° | 7. 40° | 8. 40° |
| 2. 60° | 4. 40° | 6. 50° | | |

EXERCISE 15l (p. 235)

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| 1. 60° | 2. 110° | 3. 90° | 4. 130° |
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