

Unit 8.1

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|--------------------|--------------------|----------------------|
| 1. a) 1,2,3,4,6,12 | b) 1,3,5,15 | c) 1,3,7,21 |
| d) 1,2,4,7,14,28 | e) 1,2,3,6,7,21,42 | f) 1,2,4,13,26,52 |
| g) 1,3,7,9,21,63 | h) 1,3,5,15,25,75 | |
| 2. a) 6,12,18,... | b) 15,30,45,... | c) 19,38,57,... |
| 3. c | 4. 1,2,4,5,10,20 | 5. 1,2,3,4,6,8,12,24 |

Unit 8.2

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|----------------------|-----------------|-------------------|------------------------------------|
| 1. a) 2 and 4 | b) 2,3,4, and 6 | c) 2,4,5, and 10 | d) 3 and 5 |
| 2. a) composite | b) prime | c) composite | d) composite e) prime f) composite |
| 3. a) 0 | b) 2 | c) 2 | d) 1 |
| 4. a) 0,2,2 | b) 0,2,4 | c) 0,0,0 | d) 1,2,2 e) 5,1,5 |
| 5. a) $\sqrt{\quad}$ | b) \times | c) $\sqrt{\quad}$ | d) \times e) $\sqrt{\quad}$ 6. 1 |
| 7. b | 8. a) F | b) T | c) F d) T |

Unit 8.3

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|-----------------------------|---------------------------|------------------------------------|------------------|-----------------------------------|
| 1. a) $2 \times 3 \times 5$ | b) $2 \times 2 \times 19$ | c) $2 \times 2 \times 3 \times 11$ | d) 2×47 | 2. $2 \times 2 \times 5 \times 5$ |
| 3. a) $7+5$ | b) $13+7$ | c) $27+5$ | d) $47+3$ | 4. b 5. 97 |

Unit 8.4

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|---------|-------|-------|------------------------|------|-------|
| 1. a) 5 | b) 12 | c) 14 | d) 8 | e) 6 | f) 15 |
| 2. 6 | 3. b | 4. 30 | 5. $2 \times 3^2 = 18$ | | |

Unit 8.5

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|---------------------|------------------|---------------------|------------------|-------------------------------|------------------|
| 1. a) $\frac{5}{6}$ | b) $\frac{1}{4}$ | c) $\frac{3}{8}$ | d) $\frac{1}{3}$ | e) $\frac{4}{7}$ | 2. $\frac{1}{3}$ |
| 3. $\frac{2}{3}$ | 4. b | 5. a) $\frac{2}{3}$ | b) $\frac{2}{3}$ | 6. $\frac{3}{8}; \frac{5}{8}$ | |

Unit 8.6

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|---|-------------------|--------------------|--------------------|------|
| 1. a) B | b) D | c) A | d) E | e) C |
| 2. a) 28 | b) 16 | c) 12 | d) 20 | e) 3 |
| 3. a) $\frac{12}{20}$ | b) $\frac{9}{15}$ | c) $\frac{18}{30}$ | d) $\frac{27}{45}$ | 4. c |
| 5. $\frac{1}{2}, \frac{1}{2}, \frac{5}{8}$; Ricky and Sophie | | | | |
| 6. a) D | b) E | c) A | d) C | e) B |

Unit 8.7

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|---------------------------------|-------------------|------------------|---|-------------------|------------------|
| 1. a) $\frac{4}{5}$ | b) $2\frac{1}{2}$ | c) $\frac{6}{7}$ | d) $\frac{2}{5}$ | e) $\frac{3}{13}$ | f) $\frac{1}{4}$ |
| 2. $\frac{9}{16}; \frac{7}{16}$ | 3. $\frac{1}{2}$ | 4. c | 5. 2,3,4,5,6,7,8,9,10,11,12; $\frac{5}{11}$ | | |

Unit 8.9

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|----------------|------------|------------------|---|-------|
| 1. a) 98 | b) 196 | d) 497 | e) 994 | 2. 60 |
| 3. 455; 5,7,13 | 4. 9,36,45 | 5. $\frac{2}{5}$ | 6. $\frac{2}{4} = \frac{3}{6} = \frac{79}{158}$ | |
| 8. yes (truth) | | | | |