

Answers

1.4 Practice A

1. 2, 3, 5, 6, 10 2. 3, 5 3. 3, 9

4. not possible; 152 is divisible by 2, but not divisible by 3. Therefore, 152 is not divisible by 6.

5. $14 = 1 \cdot 14$ 6. $26 = 1 \cdot 26$
 $14 = 2 \cdot 7$ $26 = 2 \cdot 13$

7. $51 = 1 \cdot 51$
 $51 = 3 \cdot 17$

8. $18 = 1 \cdot 18$
 $18 = 2 \cdot 9$
 $18 = 3 \cdot 6$

9. $36 = 1 \cdot 36$
 $36 = 2 \cdot 18$
 $36 = 3 \cdot 12$
 $36 = 4 \cdot 9$
 $36 = 6 \cdot 6$

10. $47 = 1 \cdot 47$ 11. $9 = 3^2$

12. $49 = 7^2$ 13. $28 = 2^2 \cdot 7$

14. $50 = 2 \cdot 5^2$ 15. $66 = 2 \cdot 3 \cdot 11$

16. $38 = 2 \cdot 19$ 17. 700

18. 396 19. $144 = 2^4 \cdot 3^2$

20. $243 = 3^5$ 21. $475 = 5^2 \cdot 19$

22. Composite because the total number of students is divisible by 3.

23. four arrangements; 120 by 1, 40 by 3, 24 by 5, or 8 by 15

24. a. *Sample answer:* $2 \cdot 3 \cdot 7 = 42$

b. *Sample answer:* $2^3 \cdot 5 \cdot 7^2 = 1960$

1.6 Practice A

1. 6 2. 20 3. 18 4. 15

5. 56 6. 12 7. 14 8. 42

9. 48 10. 60 11. 90 12. 78

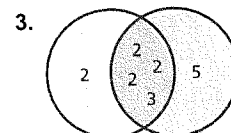
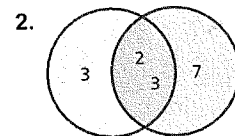
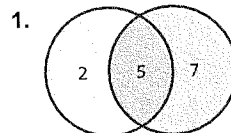
13. 96 14. 200 15. 168

16. 5 is the GCF, not LCM; The LCM is 30.

17. a. 21 days b. 2 piano lessons; 6 tuba lessons

18. 105 19. 66 20. 24 21. 7:35 A.M.

1.5 Practice A



4. 4 5. 11 6. 10 7. 17

8. 1 9. 6 10. 12 11. 15

12. 18 13. 39 14. 21 15. 1

16. a. 6 practice teams

b. 2 new and 2 returning female students

17. 9 18. 4 19. 8

20. *Sample answer:* 13, 26, 39

21. sometimes 22. sometimes

23. a. 6

b. *Sample answer:* 54

Extension 1.6 Practice

1. $\frac{15}{20}, \frac{2}{20}$

2. $\frac{16}{24}, \frac{15}{24}$

3. $\frac{15}{42}, \frac{7}{42}$

4. $\frac{6}{18}, \frac{15}{18}, \frac{8}{18}$

5. >

6. >

7. <

8. =

9. $1\frac{1}{10}$

10. $\frac{7}{36}$

11. $\frac{23}{56}$

12. $\frac{23}{30}$

13. $7\frac{7}{8}$

14. $3\frac{13}{36}$

15. $2\frac{4}{21}$

16. $2\frac{23}{30}$

17. Exercises 9, 10, and 15; The GCF is 1.