

# 1.39

## Least Common Multiple

### • Example 1

Find the least common multiple of 6 and 8.

#### Multiples

48 is also a common multiple of 6 and 8, but we are looking for the *smallest* such number.

6: 6, 12, 18, (24), 30, 36, 42, 48, . . .

8: 8, 16, (24), 32, 40, 48, . . .

We see that 24 is the smallest number common to both lists. So 24 is the LCM of 6 and 8.

#### ● ● ● CHECK YOURSELF 1

Find the LCM of 12 and 18.

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#### ● ● ● CHECK YOURSELF ANSWERS

1. The LCM is 36.

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# 1.39 Exercises

Name \_\_\_\_\_

Section \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

Find the least common multiple (LCM) for each of the following pairs of numbers.

- |               |               |
|---------------|---------------|
| 1. 2 and 3    | 2. 3 and 5    |
| 3. 4 and 6    | 4. 6 and 9    |
| 5. 10 and 20  | 6. 12 and 36  |
| 7. 9 and 12   | 8. 20 and 30  |
| 9. 12 and 16  | 10. 10 and 15 |
| 11. 12 and 15 | 12. 12 and 21 |
| 13. 18 and 36 | 14. 25 and 50 |
| 15. 25 and 40 | 16. 10 and 14 |

A N S W E R S

17. 30 and 40

18. 18 and 24

17. \_\_\_\_\_

19. 8 and 15

20. 20 and 21

18. \_\_\_\_\_

21. 30 and 150

22. 36 and 72

19. \_\_\_\_\_

23. 8 and 48

24. 15 and 60

20. \_\_\_\_\_

25. 4 and 12

26. 8 and 16

21. \_\_\_\_\_

27. 8 and 9

28. 15 and 20

22. \_\_\_\_\_

29. 5 and 25

30. 14 and 21

23. \_\_\_\_\_

31. 8 and 12

32. 20 and 25

24. \_\_\_\_\_

33. 18 and 30

34. 12 and 18

25. \_\_\_\_\_

35. 7 and 9

36. 8 and 11

26. \_\_\_\_\_

27. \_\_\_\_\_

28. \_\_\_\_\_

29. \_\_\_\_\_

30. \_\_\_\_\_

31. \_\_\_\_\_

32. \_\_\_\_\_

33. \_\_\_\_\_

34. \_\_\_\_\_

35. \_\_\_\_\_

36. \_\_\_\_\_