

LESSON
5-1 **Practice A**
Least Common Multiple

List the first five multiples.

1. 2

2. 6

3. 12

4. 3

5. 7

6. 10

Find the least common multiple (LCM).

7. 2 and 3

2: _____

3: _____

8. 2 and 8

2: _____

8: _____

9. 2 and 4

2: _____

4: _____

10. 2, 3, and 4

2: _____

3: _____

4: _____

11. 3, 4, and 6

3: _____

4: _____

6: _____

12. 3, 5, and 10

3: _____

5: _____

10: _____

13. 2, 4, and 5

14. 2, 4, and 6

15. 2, 3, and 6

16. Hot dogs come in packs of 8. Hot dog rolls come in packs of 12. What is the least number of packs of each Shawn should buy to have enough to serve 24 people and have none left over?

17. Debbie wants to invite 60 people to her party. Invitations come in packs of 12 and stamps come in sheets of 10. What is the least number of each she should buy to mail an invitation to each person and have no supplies left over?

LESSON Practice A
5-1 Least Common Multiple

List the first five multiples.

1. 2 <u>2, 4, 6, 8, 10</u>	2. 6 <u>6, 12, 18, 24, 30</u>	3. 12 <u>12, 24, 36, 48, 60</u>
4. 3 <u>3, 6, 9, 12, 15</u>	5. 7 <u>7, 14, 21, 28, 35</u>	6. 10 <u>10, 20, 30, 40, 50</u>

Find the least common multiple (LCM).

7. 2 and 3 2: _____ 3: _____ <u>6</u>	8. 2 and 8 2: _____ 8: _____ <u>8</u>	9. 2 and 4 2: _____ 4: _____ <u>4</u>
10. 2, 3, and 4 2: _____ 3: _____ 4: _____ <u>12</u>	11. 3, 4, and 6 3: _____ 4: _____ 6: _____ <u>12</u>	12. 3, 5, and 10 3: _____ 5: _____ 10: _____ <u>30</u>
13. 2, 4, and 5 <u>20</u>	14. 2, 4, and 6 <u>12</u>	15. 2, 3, and 6 <u>6</u>

16. Hot dogs come in packs of 8. Hot dog rolls come in packs of 12. What is the least number of packs of each Shawn should buy to have enough to serve 24 people and have none left over?
3 packs of hot dogs and 2 packs of rolls

17. Debbie wants to invite 60 people to her party. Invitations come in packs of 12 and stamps come in sheets of 10. What is the least number of each she should buy to mail an invitation to each person and have no supplies left over?
5 packs of invitations and 6 sheets of stamps

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LESSON Practice B
5-1 Least Common Multiple

Find the least common multiple (LCM).

1. 2 and 5 <u>10</u>	2. 4 and 3 <u>12</u>	3. 6 and 4 <u>12</u>
4. 6 and 8 <u>24</u>	5. 5 and 9 <u>45</u>	6. 4 and 5 <u>20</u>
7. 10 and 15 <u>30</u>	8. 8 and 12 <u>24</u>	9. 6 and 10 <u>30</u>
10. 3, 6, and 9 <u>18</u>	11. 2, 5, and 10 <u>10</u>	12. 4, 7, and 14 <u>28</u>
13. 3, 5, and 9 <u>45</u>	14. 2, 5, and 8 <u>40</u>	15. 3, 9, and 12 <u>36</u>

16. Mr. Stevenson is ordering shirts and hats for his Boy Scout troop. There are 45 scouts in the troop. Hats come in packs of 3, and shirts come in packs of 5. What is the least number of packs of each he should order to so that each scout will have 1 hat and 1 shirt, and none will be left over?
15 packs of hats and 9 packs of shirts

17. Tony wants to make 36 party bags. Glitter pens come in packs of 6. Stickers come in sheets of 4, and balls come in packs of 3. What is the least number of each package he should buy to have 1 of each item in every party bag, and no supplies left over?
6 packs of pens, 9 sheets of stickers, and 12 packs of balls

18. Glenda is making 30 school supply baskets. Notepads come in packs of 5. Erasers come in packs of 15, and markers come in packs of 3. What is the least number of each package she should buy to have 1 of each item in every basket, and no supplies left over?
6 packs of notepads, 2 packs of erasers, and 10 packs of markers

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LESSON Practice C
5-1 Least Common Multiple

Find the least common multiple (LCM).

1. 6 and 9 <u>18</u>	2. 6 and 10 <u>30</u>	3. 12 and 8 <u>24</u>
4. 5 and 13 <u>65</u>	5. 9 and 12 <u>36</u>	6. 11 and 12 <u>132</u>
7. 4, 7, and 14 <u>28</u>	8. 5, 12, and 15 <u>60</u>	9. 8, 14, and 16 <u>112</u>
10. 6, 8, and 16 <u>48</u>	11. 4, 8, and 64 <u>64</u>	12. 6, 10, and 12 <u>60</u>
13. 3, 6, 9, and 12 <u>36</u>	14. 4, 6, 8, and 10 <u>120</u>	15. 2, 6, 8, and 12 <u>24</u>

16. Mr. Simon wants to make packages of art supplies for his students. Pads of paper come 4 to a box, pencils come 27 to a box, and erasers come 12 to a box. What is the least number of kits he can make if he wants each kit to be the same and he wants no supplies left over? How many boxes of paper must he buy? how many boxes of pencils? how many boxes of erasers?
108 kits; 27 boxes of paper; 4 boxes of pencils; 9 boxes of erasers

17. Find the LCM and the GCF of 48 and 72. Now find the product of 48 and 72 and the product of the GCF and LCM. Describe the relationship between the two products. This relationship is true for all whole numbers. How could you use this relationship to solve problems?
The product of the two numbers is equal to the product of the LCM and the GCF. Possible answer: If you know the GCF of two numbers, you can divide the product of those two numbers by the GCF to find the LCM.

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LESSON Reteach
5-1 Least Common Multiple

The smallest number that is a multiple of two or more numbers is called the least common multiple (LCM).

To find the least common multiple of 3, 6, and 8, list the multiples for each number and put a circle around the LCM in the three lists.

Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24
 Multiples of 6: 6, 12, 18, 24, 30, 36, 42
 Multiples of 8: 8, 16, 24, 32, 40, 48, 56
 So 24 is the LCM of 3, 6, and 8.

List the multiples of each number to help you find the least common multiple of each group.

1. 3 and 4 Multiples of 3: _____ Multiples of 4: _____ LCM: <u>12</u>	2. 5 and 7 Multiples of 5: _____ Multiples of 7: _____ LCM: <u>35</u>	3. 8 and 12 Multiples of 8: _____ Multiples of 12: _____ LCM: <u>24</u>
4. 2 and 9 Multiples of 2: _____ Multiples of 9: _____ LCM: <u>18</u>	5. 4 and 6 Multiples of 4: _____ Multiples of 6: _____ LCM: <u>12</u>	6. 4 and 10 Multiples of 4: _____ Multiples of 10: _____ LCM: <u>20</u>
7. 2, 5, and 6 Multiples of 2: _____ Multiples of 5: _____ Multiples of 6: _____ LCM: <u>30</u>	8. 3, 4, and 9 Multiples of 3: _____ Multiples of 4: _____ Multiples of 9: _____ LCM: <u>36</u>	9. 8, 10, and 12 Multiples of 8: _____ Multiples of 10: _____ Multiples of 12: _____ LCM: <u>120</u>

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