

# Why Don't Clams and Crabs Share Their Toys With Each Other?

For each exercise, write the letter of the answer in the box containing the number of the exercise.

The expanded form of an algebraic expression is given, followed by five possible factors of this expression. Find and circle the one that is NOT a factor.

1.  $308n = 2 \cdot 2 \cdot 7 \cdot 11 \cdot n$       M 14      V 44      C  $77n$       **W 12**      K  $28n$   
 2.  $18x^2y = 2 \cdot 3 \cdot 3 \cdot x \cdot x \cdot y$       R  $3x$       J  $18xy$       **L  $2xy^2$**       N  $6x^2$       G  $9y$   
 3.  $40ab^3 = 2 \cdot 2 \cdot 2 \cdot 5 \cdot a \cdot b \cdot b \cdot b$       B  $5ab^2$       U  $4b^2$       J  $10ab^3$       **E  $2a^2b$**       P  $8ab$

The expanded form of each algebraic expression is given. Use these to find each GCF.

- $12x^2 = 2 \cdot 2 \cdot 3 \cdot x \cdot x$       4. GCF of  $12x^2$  and  $9xy^2$       **3X**  
 $9xy^2 = 3 \cdot 3 \cdot x \cdot y \cdot y$       5. GCF of  $12x^2$  and  $14x^3y$        **$2x^2$**   
 $14x^3y = 2 \cdot 7 \cdot x \cdot x \cdot x \cdot y$       6. GCF of  $9xy^2$  and  $14x^3y$       **xy**  
 $45y^4 = 3 \cdot 3 \cdot 5 \cdot y \cdot y \cdot y \cdot y$       7. GCF of  $9xy^2$  and  $45y^4$        **$9y^2$**

Answers 4-7			
<b>E</b> $2x^2$	<b>B</b> $2xy^2$		
<b>D</b> $6y$	<b>S</b> $3x$		
<b>O</b> $9y^2$	<b>T</b> $xy$		

Write the expanded form of each algebraic expression. Then use these to find each GCF.

- $10b^2 = 2 \cdot 5 \cdot b \cdot b$       8. GCF of  $10b^2$  and  $49a^4b$       **b**  
 $49a^4b = 7 \cdot 7 \cdot a \cdot a \cdot a \cdot a \cdot b$       9. GCF of  $10b^2$  and  $20ab^3$        **$10b^2$**   
 $20ab^3 = 2 \cdot 2 \cdot 5 \cdot a \cdot b \cdot b \cdot b$       10. GCF of  $49a^4b$  and  $35a^2b$        **$7a^2b$**   
 $35a^2b = 5 \cdot 7 \cdot a \cdot a \cdot b$       11. GCF of  $20ab^3$  and  $35a^2b$        **$5ab$**

Answers 8-11			
<b>N</b> $4a^2$	<b>I</b> $10b^2$		
<b>H</b> $5ab$	<b>U</b> $2ab^2$		
<b>A</b> $b$	<b>S</b> $7a^2b$		

The expanded form of each algebraic expression is given. Use these to find each LCM.

- $6xy = 2 \cdot 3 \cdot x \cdot y$       12. LCM of  $6xy$  and  $9x^2$        **$18x^2y$**   
 $9x^2 = 3 \cdot 3 \cdot x \cdot x$       13. LCM of  $6xy$  and  $15xy^3$        **$30xy^3$**   
 $15xy^3 = 3 \cdot 5 \cdot x \cdot y \cdot y \cdot y$       14. LCM of  $6xy$  and  $2x^5y$        **$6x^5y$**   
 $2x^5y = 2 \cdot x \cdot x \cdot x \cdot x \cdot x \cdot y$       15. LCM of  $9x^2$  and  $15xy^3$        **$45x^2y^3$**

Answers 12-15			
<b>L</b> $30xy^3$	<b>T</b> $24x^3y$		
<b>H</b> $45x^2y^3$	<b>Y</b> $6x^5y$		
<b>E</b> $18x^2y$	<b>S</b> $60xy^2$		

Write the expanded form of each algebraic expression. Then use these to find each LCM.

- $8kn = 2 \cdot 2 \cdot 2 \cdot k \cdot n$       16. LCM of  $8kn$  and  $12n^2$        **$24kn^2$**   
 $12n^2 = 2 \cdot 2 \cdot 3 \cdot n \cdot n$       17. LCM of  $8kn$  and  $5k^4$        **$40k^4n$**   
 $5k^4 = 5 \cdot k \cdot k \cdot k \cdot k$       18. LCM of  $8kn$  and  $14kn^3$        **$56kn^3$**   
 $14kn^3 = 2 \cdot 7 \cdot k \cdot n \cdot n \cdot n$       19. LCM of  $5k^4$  and  $14kn^3$        **$70k^4n^3$**

Answers 16-19			
<b>T</b> $56kn^3$	<b>R</b> $24kn^2$		
<b>W</b> $44k^3n$	<b>H</b> $70k^4n^3$		
<b>F</b> $40k^4n$	<b>D</b> $72k^2n^3$		

6 | 11 | 3 | 14 | 8 | 16 | 12 | 18 | 1 | 7 | 10 | 19 | 5 | 13 | 2 | 17 | 9 | 4 | 15  
 T | W | E | Y | a | r | e | T | W | o | s | h | e | l | l | f | i | s | h

