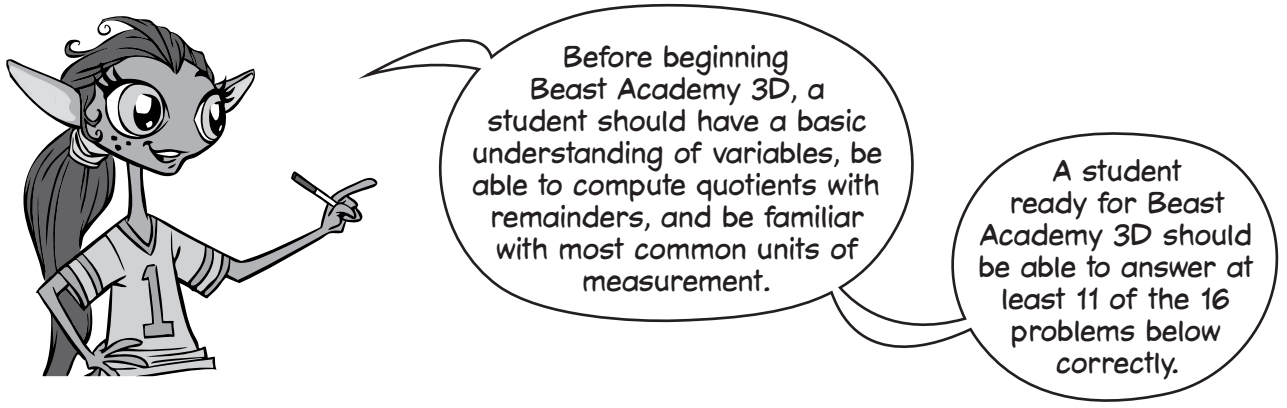
Are you ready for Beast Academy 3D?



Step 1. The student should try to answer every question without a calculator and without help.

Step 2. Check the student's answers using the solutions at the end of this document.

Step 3. The student should be given a second chance on problems that he or she answered incorrectly.

Solve for the variable in each equation below:

1. $54 = 9 \times w$ **2.** $37 + n = 115$

1. $w =$ _____

2. $n =$ _____

3. Evaluate $w \times 10 + 6$ for $w = 45$. **3.** _____

4. Evaluate $300 - 2 \times k$ for $k = 10$. **4.** _____

5. Simplify $9 + y - 4 + y + 12 - y$. **5.** _____

6. Write an equation with the same meaning as the sentence below. Then, solve for m. **6.** _____

Seven less than m is sixty-six.

$m =$ _____

7. When 35 is divided by 8, the quotient is a with remainder b. What number can be divided by 8 to get quotient b with remainder a? **7.** _____

8. What is the side length in inches of a regular hexagon that has a perimeter of 8 feet? **8.** _____

9. What is the remainder when 24×17 is divided by 7? **9.** _____

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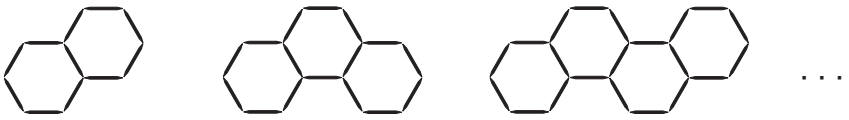
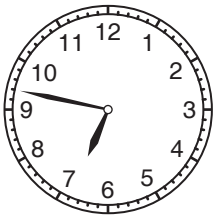
10. Grogg arranges toothpicks to make hexagons as shown below. It takes 11 toothpicks to make 2 hexagons, 16 toothpicks to make 3 hexagons, and 21 toothpicks to make four hexagons. How many toothpicks will Grogg need to make 50 hexagons if he continues this pattern? **10.** _____



11. What will the time be 93 minutes ***after*** the time shown on the clock below? **11.** _____



12. Fill in the empty white squares in the puzzle below so that each of the five equations in the puzzle is true.

54	÷	3	=	
		×		÷
30	÷		=	
		=		=
45	÷	15	=	

13. How many seconds are in two hours? **13.** _____

14. How many inches are in five yards? **14.** _____

15. The perimeter of a square is one meter. What is the length in centimeters of one side of the square? **15.** _____

16. Dara has nine U. S. coins for a total of 68 cents. How many nickels does she have? **16.** _____

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