1. Write the variable expression represents the phrase?
   the sum of a and b
   the difference of a and b
   the product of a and b
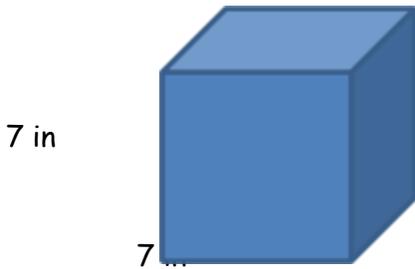   *the quotient of a and b*

2. Evaluate the expression if $a = 19$
   $37 - a$

3. Evaluate the power
   5^5

4. Use the formula $V = s^3$ to find the volume of the cube with side lengths of s

   7 in

   7 in

5. Evaluate the expression.
   $4 + 6(3 + 4)^2$

6. Selina's mother drove 65miles per hour for 4 hours and 55 miles per hour for 5 hours. How far did she drive in all?

7. Find the opposite of the integer 41.
Find the opposite of the integer -41.

8. Which of the following statements is false?

   a) $16 > 2$
   b) $-16 > -20$
   c) $16 < 20$
   d) $-20 > -16$

9. Find the sum.
   $-9 + 6 + (-11)$

10. Find the product

$-7(7)$

11. Use the distributive property to rewrite the expression.
    $3(9x - 5)$

12. Kaye runs a small business with three employees. She pays on employee $3200 a month, another $2400 a month and the third $1800 a month. How much does she pay her employees in a year?

13. Simplify the expression
    $8x + 42x$

14. Simplify the expression.
    $9(x - 5) - 7(x + 20)$

15. Determine which value is a solution of the equation
    $9x = 99$

16. Solve the equation.
    $p + 8 = -7$

17. Tomi owns 7times as many CDs as Lemont. Lemont owns 39 CDs. How many CDs does Tomi own?

18. Solve the equation.
    $-19 = 16 + 13x$

19. Solve the equation.
    $8n + 42 - 4n + 42 = -8$

20. Solve the equation
    $21 + 4x = -3x + 21$

21. A triangle is isosceles if it has two sides the same length. Find the value of x so that triangle ABC is isosceles.

    $4x - 6$ 4

$2x$

22. The average distance from the Earth to the moon is about 416,000 kilometers. What is the number written in scientific notation?

23. Which value is equivalent to 5^{-3}?

24. A moving company charges $80 plus $0.55 per mile to rent a van. Another company charges $50 plus $0.70 per mile to rent the same van. For what number of miles will the rental cost be the same for both companies?

25. Which of the following does *not* represent a rational number?

   a) -333
   b) $\frac{13}{23}$
   c) $\sqrt{80}$
   d) $23.08\overline{34}$

26. The school marching band has 49 members. The band director wants to arrange the band members into a square formation. How many band members should be in each row?

27. A taxicab service charges $5.75 plus $0.55 per mile. Molly takes a taxicab from the hotel to the airport. If the total charge was $12.35, which equation could be used to determine the number of miles from the hotel to the airport?

28. Which expression is equivalent to the expression below?

   $x \cdot x \cdot x \cdot m \cdot x \cdot m \cdot m \cdot m \cdot m \cdot f$

29. What is the solution to the equation below?

   $-\frac{4}{3}p + \frac{2}{6} = \frac{14}{10}$

   a) $-\frac{13}{10}$
   b) $-\frac{4}{5}$
   c) $-\frac{26}{45}$
   d) $-\frac{16}{45}$

30. Solve the equation below for t.

   $9t - 15 = -61 + 3t$

31. The distance from the Sun to Earth is about 1.8×10^{12} meters. Suppose light travels at a speed of 6×10^8 meters per second. About how long does it take light from the Sun to reach Earth?

32. What is the value of b in the equation below?

   $7(b - 1) = 14b + 70$

33. The table shows the populations of several states. What is the population of all the states, written in scientific notation?
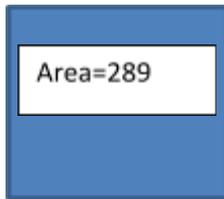
State	ulation
gia	00,000
is	00,000
	00,000
ornia	00,000

34. Which is the equivalent to $\sqrt{92}$ in decimal form?

$$8(2f - 3) = 4(4f - 8)$$

35. Which of the expressions below is *not*
    equivalent to the other three?
    a) 0.037037
    b) 37.037%
    c) 3^{-3}
    d) $\frac{1}{27}$

43. Solve.
$$1\tfrac{7}{12}y = 4\tfrac{1}{4}$$

44. Solve.
$$-12\tfrac{1}{5} - 16\tfrac{4}{9}$$

36. The area of a square living room is
    289square feet. What is the perimeter
    of the room?

    Area=289

    a) $-\frac{251}{10}$
    b) $\frac{251}{10}$
    c) $\frac{42}{10}$
    d) $-\frac{42}{10}$

37. Between which two integers does $\sqrt{91}$ lie?

38. Which of the following symbols results in
    a true number sentence when placed in
    the blank?

$\sqrt{17.64}$ _____ $4\tfrac{1}{5}$

    a) =
    b) >
    c) <
    d) ×

39. Which of the following numbers has the
    least absolute value?

    a) 4.5×10^{-5}
    b) 9.75×10^{-7}
    c) 6.62×10^{3}
    d) 2.002×10^{12}

40. Write an equation that shows the
    following relationship.
    eight less than six times a number is equal to 6

41. Simplify the equation and solve
    $$10(n + 6) = 10(n - 3) + 40$$

42. Solve the equation.