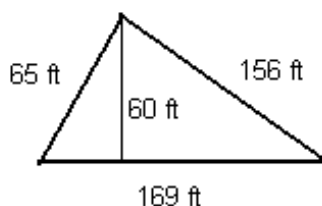


- Use words to write the number 20 172 004 038. **twenty billion, one hundred seventy-two million, four thousand, thirty-eight**
- Round 20 172 004 038 to the nearest million. **20 172 000 000**
- Compute the perimeter and area of the triangle shown on the picture below. Include units in your computation and answer.  **$P = 390 \text{ ft}$   $A = 5070 \text{ ft}^2$**



- Consider the following numbers: 4181, 9800, 1296, 55050. Find all numbers from the list that are
  - divisible by 3. **1296, 55050**
  - divisible by 10. **9800, 55050**
  - divisible by 6. **1296, 55050**
- Find the least common multiple of 210, 75, and 96. **16 800**
- List all prime numbers between 30 and 45. **31, 37, 41, 43**
- Compute the average of  $-2$ ,  $0$ ,  $-12$ ,  $31$ ,  $48$ ,  $-91$ , and  $-2$ .  **$-4$**
- Compute  $\frac{7}{9}$  of 72. **56**
- Write  $\frac{2}{9}$  as a fraction with denominator 36.  **$\frac{8}{36}$**
- Reduce  $\frac{64}{120}$  to lowest terms.  **$\frac{8}{15}$**
- Which fraction is greater,  $\frac{3}{4}$  or  $\frac{8}{11}$ ?  **$\frac{3}{4}$**
- Perform the indicated operations. Show all steps.
  - $\frac{(-2)^2 - 3^3 - (-4)^2 - |-2 - 3|}{2 - (2^3 - 2)} = \mathbf{11}$
  - $\frac{-4((-5 + 2) - 3(-2 - 1))}{(3 + 3^3) \div (2^2 + (-1)^4)} = \mathbf{-4}$
  - $-2 - (-2)^2 - (-2)^3 - (-2)^4 - (-2)^5 = \mathbf{18}$
  - $\frac{-2(-5(-3 + 2^2) - (3 - (-4)))}{3^3 - 2 \cdot 7 - 1} = \mathbf{2}$
- Evaluate each of the following expressions if  $x = -2$  and  $y = 3$ .
  - $x^4 - 3x^3 + 2x^2 + 5x - 7 = \mathbf{31}$
  - $(y - 2)(x + 5) - 2x = \mathbf{7}$

14. Solve each of the following equations. Make sure to check your solution.

a)  $-2x - 3 = 11$     $-7$       b)  $3x + 91 = 85$     $-2$       c)  $\frac{x-1}{3} = 5$     $16$