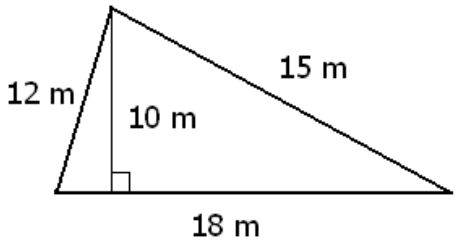
Problem Set 30

1. Use words to write the number 218 060 071 208

2. Round 419 683 455 to the nearest hundred thousand.

3. Compute the perimeter and area of the triangle shown on the picture below. Include units in your computation and answer.



4. Compute the average of all prime numbers between 30 and 45.

5. Compute the least common multiple of 24, 39, and 45.

6. Compute $\frac{2}{11}$ of 4400.

7. Write $\frac{3}{4}$ as a fraction with denominator 100.

8. Reduce $\frac{72}{96}$ to lowest terms.

9. Which fraction is greater, $\frac{2}{9}$ or $\frac{4}{19}$?

10. Perform the indicated operations. Show all steps.

a) $\frac{1}{2}+\frac{1}{3}$ c) $\frac{2}{5}-\frac{1}{3}$ e) $\frac{(-3+7)-8\div 2^3}{|2^2-5|}$ g) $\left(\left((1-2)^2-2\right)^2-2\right)^2-2$

b) $3+\frac{1}{4}$ d) $4-\frac{2}{7}$ f) $\frac{(-2)^2\,(2-|-5|)}{(1-3)\left(2-(-2)^2\right)}$

11. Evaluate each of the following expressions if $x=2$ and $y=-5$.

a) $\frac{y^2-2x}{x+1}$ b) x^2+y^2-2xy

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

a) $-8x+3=-5$ b) $\frac{m}{5}-2=30$ c) $\frac{q-5}{3}=1$

