

Show all necessary steps Clearly, Neatly, and Systematically to receive full credit. Any incorrect statement will be penalized.

1. Find the equation of the line passes through the points $\left(1, \frac{1}{2}\right)$ and $\left(2, \frac{1}{3}\right)$. Write the result in standard form.

2. Solve: $\frac{x-1}{6} + x = \frac{2}{3} - \frac{x+2}{6}$.

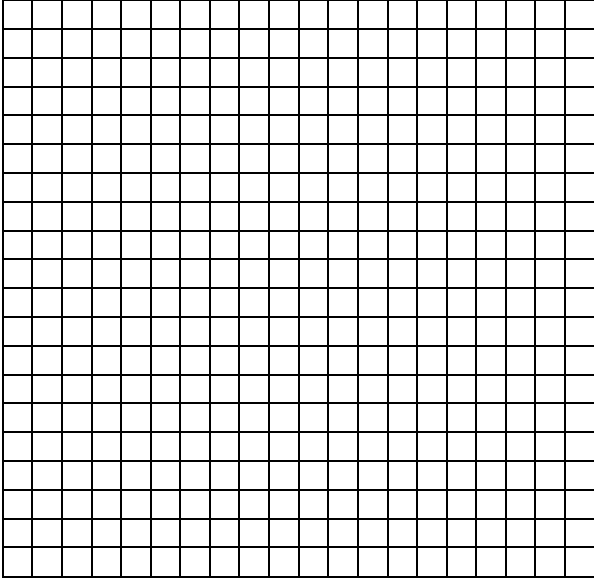
3. A pile of sand is in the shape of a cone whose radius is 10 feet and whose height is 6 feet. Find the amount of sand in the pile.

4. Solve: $I = a + (n - 1)d$ for n .

5. Simplify: $10\left[\frac{3}{5}(2s + 2t) - \frac{5}{4}(s - t) + 1\right]$.

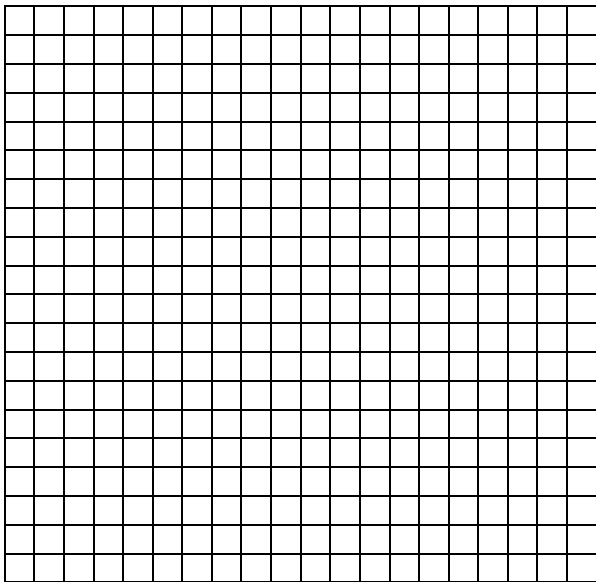
6. Solve: $6 - (x - 3) - 5x = 3[1 - 2(x + 2)]$.

7. Find x-intercept and y-intercept of the line: $\frac{2}{3}x - \frac{1}{4}y = -2$. Then graph.



8. A large warehouse stores 150 more computers than printers. The monthly storage cost for a computer is \$2.50 and a printer is \$1.50. If storage for the computers and printers is \$2775 per month, how many printers and computers are in the warehouse? (*make sure to show in 3-step format*)

9. Find the slope and y-intercept of the line: $0.4x - 0.6y = 1.2$. Then graph.



10. The measure of one angle is 15° less than half of the other angle. Find the measure of each angle if they are supplementary. (*make sure to show in 3-step format*)

11. Find the equation of the line which passes through the point $(-2, 3)$ and parallel to the line $-4x + 6y + 10 = 0$. Write the result in slope-intercept form.

12. A 186-foot television cable is to be cut into four pieces. Find the length of each piece if each successive piece is 3 feet longer than the previous one. (*make sure to show in 3-step format*)