

8. Find the equations of the lines joining each pair of points

- a.  $P(3,8)$  ;  $Q(1,4)$       b.  $A(-1,3)$  ;  $B(4,-7)$       c.  $L(6,2)$  ;  $M(8,5)$

9. Solve these pairs of equations:

- a.  $3x + 4y = 10.$       b.  $2x - 3y = 11.$       c.  $5x + 4y = 5.$   
 $5x - 2y = 8.$        $4x - 5y = 21$        $4x + 3y = 3$

10. After being updated, a machine can pack  $5.35 \times 10^{22}$  grains of rice per hour. This is 15% more than it packed before the update.

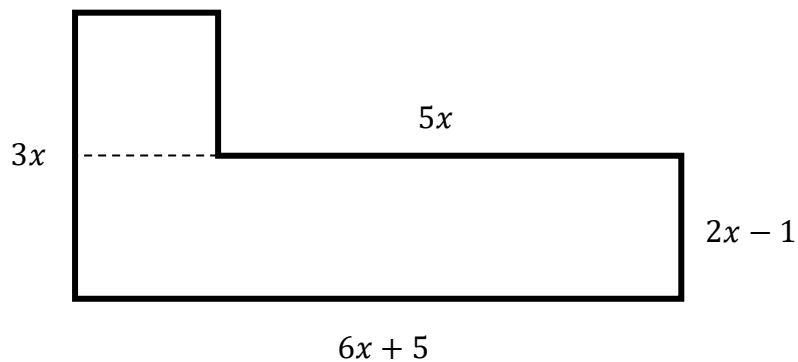
How many grains could the machine pack before the update? Give your answer in scientific notation.

11. Write each of these expressions without brackets:

- a.  $(x + 3)(2x - 7)$       b.  $(x - 8)(x + 2) - 5(x + 4)$       c.  $(2x - 3)^2$

12. Express the area of the shape below as an expression in terms of  $x$ .

All measurements are in cm.



13. Solve

$$13 - 8x \geq 3(7 - 2x)$$

14. Evaluate

$$\frac{3}{8} + \frac{5}{6} \div 1\frac{1}{4}$$