

Name _____
Mr. Schlansky

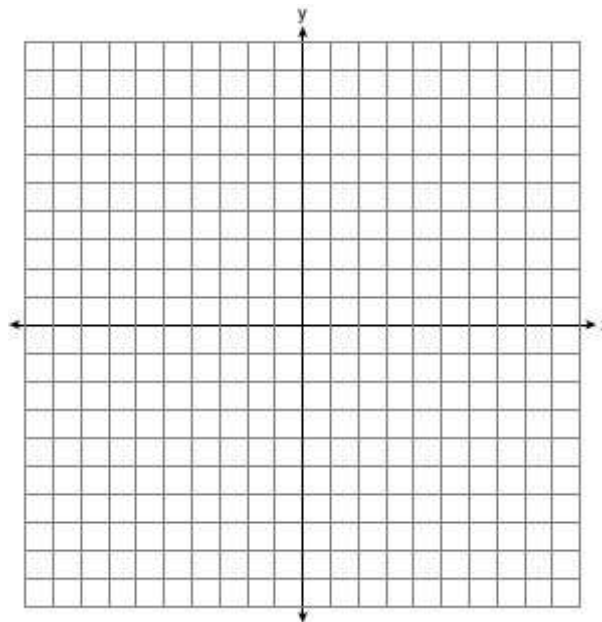
Date _____
Geometry



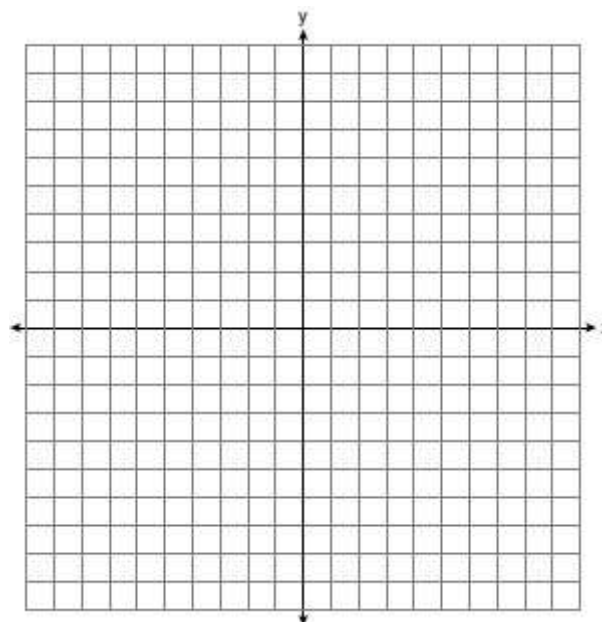
Partitions

1. What are the coordinates of the point on the directed line segment from $K(-5, -4)$ to $L(5, 1)$ that partitions the segment into a ratio of 3 to 2?

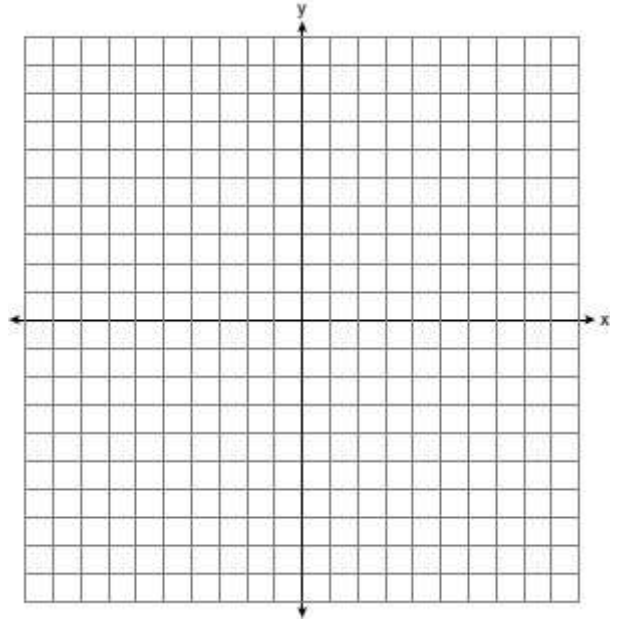
- 1) $(-3, -3)$
- 2) $(-1, -2)$
- 3) $\left(0, -\frac{3}{2}\right)$
- 4) $(1, -1)$



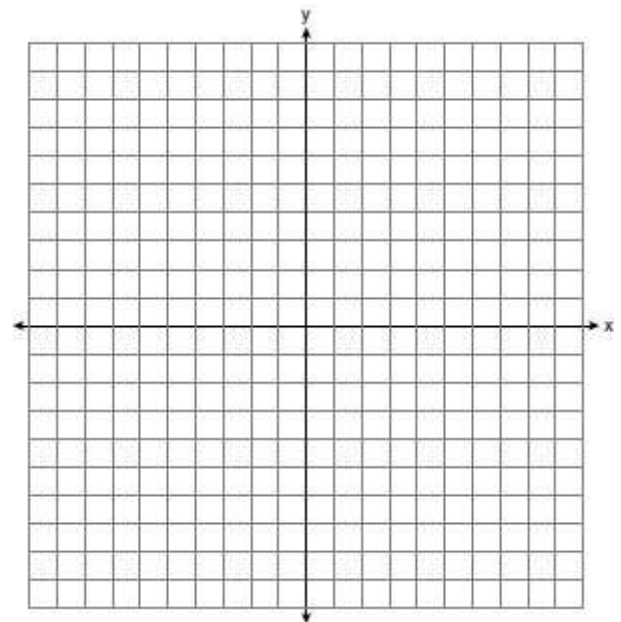
2. Directed line segment PT has endpoints whose coordinates are $P(-2, 1)$ and $T(4, 7)$. Determine the coordinates of point J that divides the segment in the ratio 2 to 1.



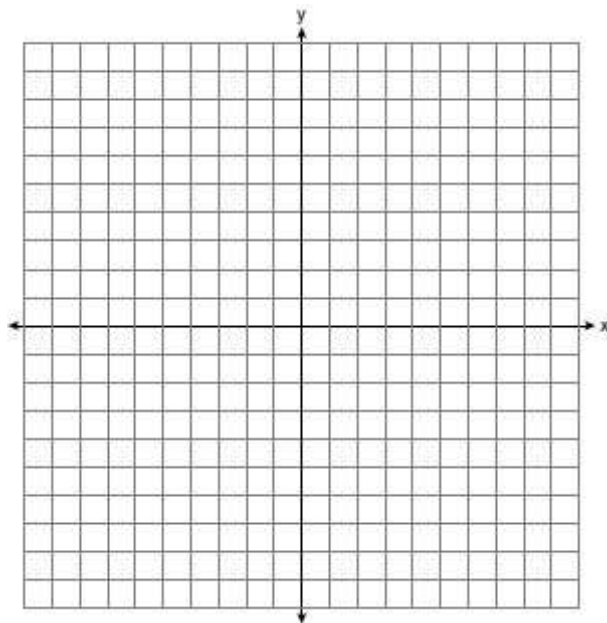
3. The coordinates of the endpoints of \overline{AB} are $A(-6, -5)$ and $B(4, 0)$. Point P is on \overline{AB} . Determine and state the coordinates of point P , such that $AP:PB$ is $2:3$.



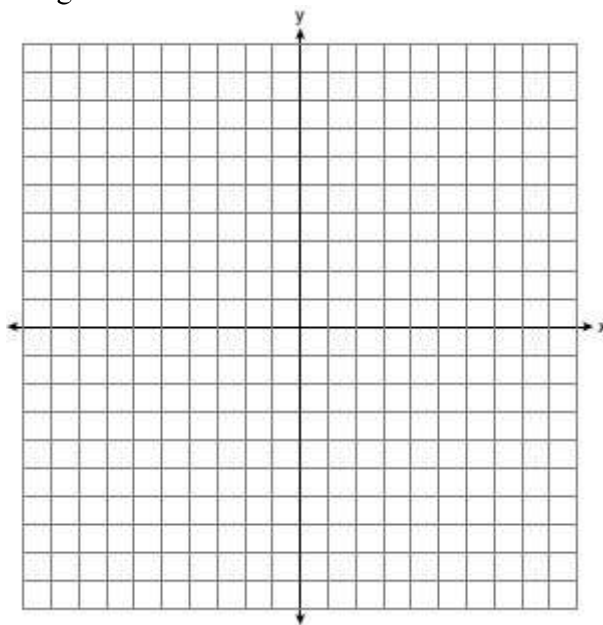
4. The endpoints of \overline{DE} are $D(-4, 4)$ and $F(6, 9)$. Determine and state the coordinates of point E , if $DE:EF = 2:3$.



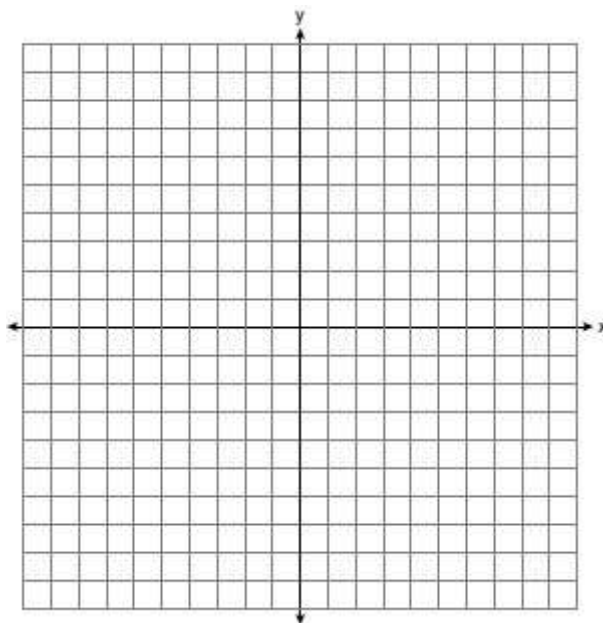
5. What are the coordinates of the point on the directed line segment from $G(-4,1)$ to $O(4,5)$ that partitions the segment into a ratio of 3 to 1?



6. Directed line segment IQ has endpoints whose coordinates are $I(-7,8)$ and $Q(-1,-4)$. Determine the coordinates of point J that divides the segment in the ratio 1 to 5.



7. What are the coordinates of the point on the directed line segment from $P(-1,6)$ to $S(5,3)$ that partitions the segment into a ratio of 1 to 2?



8. Directed line segment JQ has endpoints whose coordinates are $J(8,6)$ and $Q(-10,-3)$. Determine the coordinates of point O that divides the segment in the ratio 5 to 4.

