

1. Given the line segment \overline{MG} , $M(8,-8)$, and $G(8,10)$, determine the coordinates of the point F that partitions \overline{MG} , such that $MF:FG$ is in a ratio of 4 to 5.

2. Given the line segment \overline{CH} , $C(-10,-8)$, and $H(10,4)$, determine the coordinates of the point O that partitions \overline{CH} , such that CO to OH is in a ratio of 3:1.

3. Given the line segment \overline{NB} , $N(-10,7)$, and $B(5,10)$, determine the coordinates of the point E that divides \overline{NB} , such that $NE:EB$ is in a ratio of 2:1.

4. Given the directed line segment \overline{ZE} , $Z(0,1)$, and $E(0,10)$, determine the coordinates of the point V that divides \overline{ZE} into ratio of 5 to 4.

5. Given the line segment \overline{AR} , $A(-10,-8)$, and $R(-10,2)$, determine the coordinates of the point W that partitions \overline{AR} , such that AW to WR is in a ratio of 4 to 1.

6. Given the line segment \overline{ZK} , $Z(-2,-4)$, and $K(10,5)$, determine the coordinates of the point T that partitions \overline{ZK} , such that $ZT:TK$ is in a ratio of 2:1.

7. Given the line segment NS , $N(-5,-8)$, and $S(6,3)$, determine the coordinates of the point D that divides \overline{NS} , such that ND to DS is in a ratio of 5 to 6.

8. Given the line segment FO , $F(-4,-7)$, and $O(-1,-4)$, determine the coordinates of the point S that divides \overline{FO} , such that FS to SO is in a ratio of 1:2.

9. Given the directed line segment CN , $C(-9,-6)$, and $N(0,0)$, determine the coordinates of the point I that divides \overline{CN} into ratio of 1:2.

10. Given the line segment LS , $L(7,-10)$, and $S(7,4)$, determine the coordinates of the point B that divides \overline{LS} , such that $LB:BS$ is in a ratio of 3 to 4.

11. Given the line segment GA , $G(-9,5)$, and $A(-3,8)$, determine the coordinates of the point U that divides \overline{GA} , such that $GU:UA$ is in a ratio of 2 to 1.

12. Given the line segment OT , $O(-4,-10)$, and $T(5,8)$, determine the coordinates of the point E that divides \overline{OT} , such that $OE:ET$ is in a ratio of 4:5.

13. Given the directed line segment \overline{BW} , $B(-8,-10)$, and $W(0,-2)$, determine the coordinates of the point Y that divides \overline{BW} into ratio of 3 to 5.

14. Given the line segment \overline{GK} , $G(-5,-6)$, and $K(3,10)$, determine the coordinates of the point W that divides \overline{GK} , such that GW to WK is in a ratio of 5:3.

15. Given the line segment \overline{HA} , $H(-10,-9)$, and $A(0,6)$, determine the coordinates of the point O that partitions \overline{HA} , such that $HO:OA$ is in a ratio of 2:3.

16. Given the line segment \overline{DP} , $D(-10,-10)$, and $P(10,10)$, determine the coordinates of the point H that divides \overline{DP} , such that $DH:HP$ is in a ratio of 1:4.

17. Given the line segment \overline{FT} , $F(-10,-10)$, and $T(10,10)$, determine the coordinates of the point Z that partitions \overline{FT} , such that FZ to ZT is in a ratio of 2 to 3.

18. Given the line segment \overline{TG} , $T(-6,-1)$, and $G(8,6)$, determine the coordinates of the point U that partitions \overline{TG} , such that TU to UG is in a ratio of 6:1.

19. Given the directed line segment \overline{HU} , $H(-5,-8)$, and $U(4,10)$, determine the coordinates of the point Z that divides \overline{HU} into ratio of 5:4.

20. Given the line segment \overline{MK} , $M(-8,-8)$, and $K(3,3)$, determine the coordinates of the point C that divides \overline{MK} , such that MC to CK is in a ratio of 5:6.

21. Given the line segment \overline{RK} , $R(2,-9)$, and $K(8,3)$, determine the coordinates of the point L that divides \overline{RK} , such that RL to LK is in a ratio of 2 to 1.

22. Given the directed line segment \overline{TE} , $T(-10,-8)$, and $E(2,10)$, determine the coordinates of the point K that partitions \overline{TE} into ratio of 5 to 1.

23. Given the line segment \overline{PD} , $P(4,-6)$, and $D(4,1)$, determine the coordinates of the point E that partitions \overline{PD} , such that PE to ED is in a ratio of 6 to 1.

24. Given the directed line segment \overline{DS} , $D(0,-7)$, and $S(0,7)$, determine the coordinates of the point B that partitions \overline{DS} into ratio of 2 to 5.

1. $F = (8, 0)$
2. $O = (5, 1)$
3. $E = (0, 9)$
4. $V = (0, 6)$
5. $W = (-10, 0)$
6. $T = (6, 2)$
7. $D = (0, -3)$
8. $S = (-3, -6)$
9. $I = (-6, -4)$
10. $B = (7, -4)$
11. $U = (-5, 7)$
12. $E = (0, -2)$
13. $Y = (-5, -7)$
14. $W = (0, 4)$
15. $O = (-6, -3)$
16. $H = (-6, -6)$
17. $Z = (-2, -2)$
18. $U = (6, 5)$
19. $Z = (0, 2)$
20. $C = (-3, -3)$
21. $L = (6, -1)$
22. $K = (0, 7)$
23. $E = (4, 0)$
24. $B = (0, -3)$