

Line Formulas and Section Formula Remediation Worksheet

Name _____ Block _____

1. Write the equation of a line parallel to $2x + 8y = 16$ that passes through point $(12, -6)$.

2. Write the equation of a line perpendicular to $\frac{1}{2}x + y = 5$ through the point $(-4, 4)$.

3. Write the equation of a line parallel to $x + 3y = 18$ that passes through point $(-15, 4)$.

4. Write the equation of a line perpendicular to $45x + 9y = 5$ through the point $(40, -18)$.

5. Is $12x + 4y = 8$ parallel, perpendicular or neither to $14 + 2y = -6x$?

6. Is $7x = y - 8$ parallel, perpendicular or neither to $6x + 42y = 63$?

7. Find the point that splits segment AB into a 3 to 2 ratio, if point A is $(-4,4)$ and point B $(1,-6)$.

8. Find the point that splits segment DC into a ratio of 5:1, if point C is $(6,5)$ and D is $(3, -7)$.

9. What point on segment JK will split JK into a ratio of 1:3? $J(-1, 5)$ and $K(3, -7)$

10. If point Q is $(-1,2)$ and R is $(9,2)$, what point on segment QR breaks up QR into a ratio of 2:4?

11. If point $(3,-1)$ divides segment CD into a 1:4 ratio and point C is $(2, -4)$ what is the coordinate of point D?

12. If point $(-3,2)$ divides segment AB into a 2:1 ratio. If point A is $(-1, -8)$ what is the coordinate of point B?