

Algebra

Activity 4c - Intersection of Lines

1. Find the x -coordinate of the point of intersection of the lines

$$y = mx + b$$

$$y = nx + d$$

Your expression may contain m , n , b and d , but should not contain the variables x and y .

2. Use this formula to find the point of intersection of the lines

$$y = \frac{3}{4}x + 3$$

$$y = -\frac{1}{3}x - 2$$

3. Find the x -coordinate of the point of intersection of the lines

$$ax + by = p$$

$$cx + dy = q$$

Your expression may contain a , b , c , d , p and q , but should not contain the variables x and y .

4. Find the y -coordinate of the point of intersection of the lines

$$ax + by = p$$

$$cx + dy = q$$

Your expression may contain a , b , c , d , p and q , but should not contain the variables x and y .

5. Use the formulas above to find the point of intersection of the lines

$$3x + 5y = 17$$

$$2x + y = 9$$