



Solve the simultaneous equations

$$7x - 15y = 2.5 \quad \times 2$$

$$3x - 2y = 5.5 \quad \times 15$$

$$45x - 30y = 82.5$$

$$14x - 30y = 5$$

$$31x = 77.5$$

$$x = 2.5$$

$$7.5 - 2y = 5.5$$

$$y = 1$$

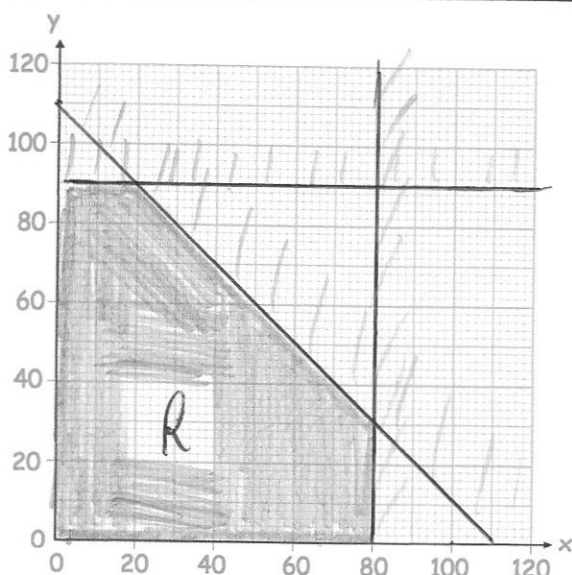
Simplify fully

$$\frac{x^2 + 8x}{x^2 + 10x + 16}$$

$$x(x+8)$$

$$(x+8)(x+2)$$

$$\frac{x}{x+2}$$



A greengrocer sells bananas and apples. In one day he sells
 up to 80 bananas
 up to 90 apples
 no more than a total of 110 pieces of fruit
 Let x be the number of bananas sold
 Let y be the number of apples sold.

Show the region below that satisfies these inequalities

Given that

$$a : b = 5 : 2 \quad \text{and} \quad b : c = 9 : 11$$

Find the ratio $a : c$

Give your answer in its simplest form.

$$a : b = c$$

$$5 : 2$$

$$\left(\begin{array}{l} \times 9 \\ \times 2 \end{array} \right) \quad 9 : 11 \quad \left(\begin{array}{l} \times 2 \\ \times 2 \end{array} \right)$$

$$45 : 18 : 22$$

$$45 : 22$$