



Solve

$$\frac{2x-5}{7} - \frac{2x-1}{2} = 3$$

$$\frac{4x-10}{14} - \frac{14x-7}{14} = 3$$

$$\frac{4x-10-14x+7}{14} = 3$$

$$-10x-3 = 42$$

$$-10x = 45$$

$$x = -4.5$$

Convert $0.5\dot{4}2$ into a fraction

$$x = 0.5424242\dots$$

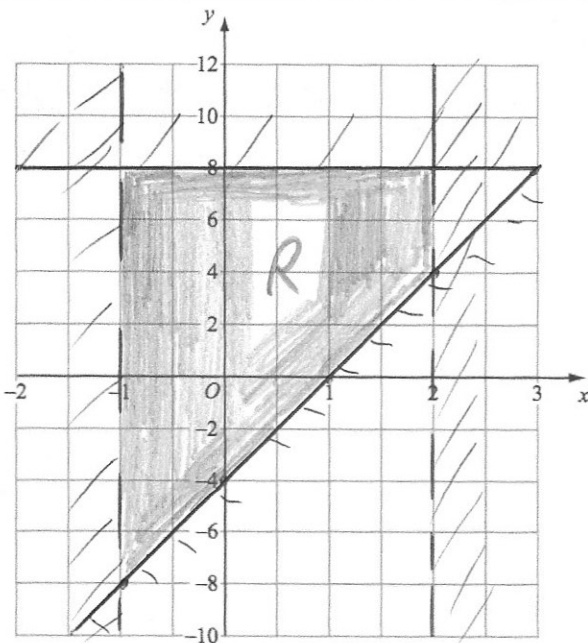
$$10x = 5.4242\dots$$

$$1000x = 542.4242\dots$$

$$990x = 537$$

$$x = \frac{537}{990}$$

$$x = \frac{179}{330}$$



On the grid, label the region that satisfies all three of these inequalities

$$-1 < x < 2$$

$$y \leq 8$$

$$y \geq 4x - 4$$

The distance of Mercury to the Earth is 77 million km. $77,000,000,000$ m
The speed of light is 2.998×10^8 m/s.

Work out how long it will take light to travel from Mercury to the Earth.
Include suitable units.

$$s = \frac{d}{t} \quad \frac{77000000000}{2.998 \times 10^8}$$

$$256.8 \text{ seconds}$$

$$\approx 4 \text{ mins } 17 \text{ sec.}$$