



Write 237.5% as a fraction.
Give your answer in its simplest form.

$$\frac{237.5}{100} \quad \frac{19}{8}$$

or $2\frac{3}{8}$

Every weekday, Sohail runs $2\frac{1}{2}$ miles.
On a Saturday and a Sunday, he runs $4\frac{2}{3}$ miles.

How far does Sohail run over the course of 1 week?

$21\frac{5}{6}$ miles

$$5 \times 2\frac{1}{2}$$

$$5 \times \frac{5}{2} = \frac{25}{2} \text{ miles (M-F)}$$

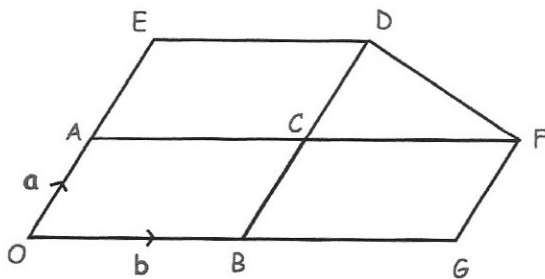
$$\frac{25}{2} + 4\frac{2}{3} + 4\frac{2}{3} \quad \frac{25}{2} + \frac{28}{3}$$

$$= \frac{25}{2} + \frac{14}{3} + \frac{14}{3} \quad \frac{75}{6} + \frac{56}{6} = \frac{131}{6}$$

Calculate the density of a piece of wood with a mass of 21g and a volume of 35cm³

$$d = \frac{m}{v} \quad \frac{21}{35} =$$

0.6 g/cm^3



In the diagram OBDE and OAFG are parallelograms.
B is the midpoint of OG.
A is the midpoint of OE.

$$\vec{OA} = \mathbf{a} \quad \text{and} \quad \vec{OB} = \mathbf{b}$$

Express, in terms of **a** and **b**, the vector

$$\vec{OE}$$

$2\mathbf{a}$

Express, in terms of **a** and **b**, the vector

$$\vec{BA}$$

$\mathbf{a} - \mathbf{b}$
or $-\mathbf{b} + \mathbf{a}$