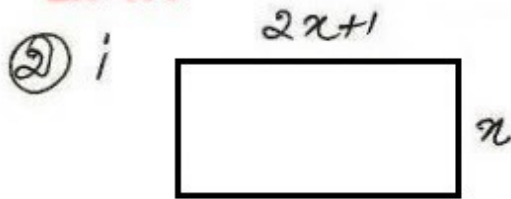


Ex 4.1

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let breadth = x m
 length = $(2x+1)$ m
 area of plot = 528 m^2
 $lb = 528$
 $(2x+1)(x) = 528$
 $\Rightarrow 2x^2 + x - 528 = 0$

2) ii) let the integers be
 $x, x+1$
 acc. to ques.
 $x(x+1) = 306$
 $\Rightarrow x^2 + x - 306 = 0$

2) iii) let actual speed
 = x km/hr

acc. to prob

$$\frac{480}{x-8} - \frac{480}{x} = 3$$

$$\Rightarrow \overset{160}{480} \left(\frac{1}{x-8} - \frac{1}{x} \right) = 3$$

$$\Rightarrow 160 \left(\frac{x - x + 8}{x^2 - 8x} \right) = 1$$

$$\Rightarrow x^2 - 8x = 160 \times 8$$

$$\Rightarrow x^2 - 8x - 1280 = 0$$

iii) let Rohan's present age = x years
 His mother's age = $(x+26)$ years
 acc. to ques.
 $(x+3)(x+26+3) = 360$
 $\Rightarrow (x+3)(x+29) = 360$
 $\Rightarrow x^2 + 32x + 87 - 360 = 0$
 $\Rightarrow x^2 + 32x - 273 = 0$