

## Ex 4.2

⑥ let no. of articles produced on a day =  $x$   
cost per art. = ₹  $(2x+3)$

acc to ques.

$$x(2x+3) = 90$$

$$\Rightarrow 2x^2 + 3x - 90 = 0$$

$$\Rightarrow 2x^2 + 15x - 12x - 90 = 0$$

$$\Rightarrow x(2x+15) - 6(2x+15) = 0$$

$$\Rightarrow (2x+15)(x-6) = 0$$

$$\Rightarrow 2x+15=0, \quad x-6=0$$

$$\Rightarrow x = -\frac{15}{2}, \quad x = 6$$

rejected

$\therefore$  no. art produced = 6

cost

= ₹ 15