

## Algebraic Fractions and Formula

8. In each of the following, find the value of the unknown.

(a)  $C = \frac{1}{2}bh$  If  $b = 15$ ,  $C = 60$ , find  $h$ .

(b)  $J = \frac{a+b}{2}$  If  $a = 19$  and  $b = 23$ , find  $J$ .

9. In each of the following, make the letter in the brackets [ ] the subject of the formula.

(a)  $b = 2 + 3a$  [  $a$  ]

(b)  $E = \frac{1}{2}\pi rh$  [  $r$  ]

Change the subject of the following formula to the letter in the bracket [ ]. (10–12)

10.  $x = \frac{y}{2} + 9$  [  $y$  ]

11.  $t = \frac{d}{s}$  [  $s$  ]

12.  $I = \frac{P}{100}nr$  [  $P$  ]

13. It is given that  $\frac{1}{a} + \frac{1}{b} = \frac{1}{c}$ .

(a) Change the subject of the formula to  $b$ .

(b) If  $a = 5$  and  $c = 4$ , find  $b$ .