**TRANSPOSING FORMULAS**

Transpose the following formulas so that the letter shown in brackets becomes the subject of the formula.

Remember the technique to doing this correctly is to follow the “reverse” order of a normal solution but using opposite operations.

Show every line of working and beside each line show the opposite operation you used.

Several examples will be done by your teacher to serve as a guide for your understanding. Write these on the right hand side of this page

1. **a = w + y (w)**
2. **a = p – q (p)**
3. **k = l + m (m)**
4. **u = v – at (v)**
5. **p = m + nt (m)**
6. **f = ma (a)**
7. **p = m + nt (n)**
8. **a = rw2 (r)**
9. $a = \frac{w + b}{2}$ **(**$w$**)**
10. $m=h\sqrt{b} $ **(b)**
11. $r= \frac{v}{i}$ **(**$v)$
12. $\frac{E}{w}= \frac{c}{a}$ **(**$E)$
13. $\frac{P}{K}= \frac{a-b}{2c}$ **(**$P)$
14. $\frac{P}{K}= \frac{a-b}{2c}$ **(**$c)$
15. **ax = y2 (x)**
16. $v=u(2-3at)$ **(t)**
17. $\frac{a}{b}= \frac{c}{d}$ **(**$d$**)**
18. $m= \frac{b-a}{c-a}$ **(**$b)$
19. $a= \frac{u+at}{s}$ **(**$u$**)**