Change of Subject

1) $t = 2w + 7$

$\frac{t-7}{2} = w$

2) $p = r - 2tg$

$2tg = r - p$

$t = \frac{(r-p)}{2g}$

3) $A = \frac{(a+b)d}{2}$

$\frac{2A}{d} = a + b$

$\frac{2A}{d} - b = a$

4) $s = ut + \frac{1}{2}at^2$

$2(s - ut) = at^2$

$\frac{2(s-ut)}{t^2} = a$

5) $v^2 = u^2 + 2as$

$\sqrt{v^2 - 2as} = u$

6) $S = \frac{D}{T}$

$T = \frac{D}{S}$

7) $A = 4\pi r^2$

$\sqrt{\frac{A}{4\pi}} = r$

8) $V = 4\pi r^3$

$\sqrt[3]{\frac{V}{4\pi}} = r$

9) $h = 4\sqrt{g}$

$\left(\frac{h}{4}\right)^2 = g$

$\frac{h^2}{16} = g$

10) $T = 2\pi\sqrt{\frac{l}{g}}$

$\frac{T^2}{4\pi^2} = \frac{l}{g}$

$\frac{4\pi^2 l}{T^2} = g$

11) $6f = 7(d + 2f)$

$6f = 7d + 14f$

$-7d = 8f$

$-\frac{7d}{8} = f$

12) $y = 5(3n - y)$

$y = 15n - 5y$

$6y = 15n$

$y = \frac{5n}{2}$

13) $g = 6 + \frac{3}{x}$

$g - 6 = \frac{3}{x}$

$\frac{1}{g-6} = \frac{x}{3}$

$\frac{3}{g-6}$

14) $V = r - \frac{d}{f^2}$

$\frac{d}{f^2} = r - V$

$\frac{f^2}{d} = \frac{1}{r-V}$

$f^2 = \frac{d}{r-V}$

$f = \sqrt{\frac{d}{r-V}}$

15) $\frac{1}{t} = \frac{1}{f} + \frac{1}{d}$

$\frac{1}{t} - \frac{1}{d} = \frac{1}{f}$

$\frac{d-t}{td} = \frac{1}{f}$

$\frac{td}{d-t} = f$

16) $\frac{5}{v} = \frac{7}{d} - \frac{6}{h}$

$\frac{6}{h} = \frac{7}{d} - \frac{5}{v}$

$\frac{6}{h} = \frac{7v - 5d}{dv}$

$\frac{h}{6} = \frac{dv}{7v - 5d}$

$h = \frac{6dv}{7v - 5d}$

17) $\frac{9}{f} = \frac{5}{v^2} - \frac{2}{j}$

$\frac{9}{f} + \frac{2}{j} = \frac{5}{v^2}$

$\frac{9j + 2f}{fj} = \frac{5}{v^2}$

$\frac{fj}{9j + 2f} = \frac{v^2}{5}$

$\sqrt{\frac{5fj}{9j + 2f}} = v$