Subject of Formula III (powers and roots)

Calculator not permitted.

Make the letter shown in brackets to the right the subject of the formula:

1. (a) $\sqrt{x} = y$ $[x]$
   (b) $\sqrt{a} - b = c$ $[a]$
   (c) $\sqrt{a - b} = c$ $[a]$
   (d) $2\sqrt{p} = q$ $[p]$
   (e) $\sqrt{2p} = q$ $[p]$
   (f) $a\sqrt{x} + b = c$ $[x]$
   (g) $\sqrt{f - g} = p^2$ $[f]$
   (h) $\dfrac{m}{\sqrt{n}} = p$ $[n]$
   (i) $a - \sqrt{b} = r$ $[b]$
   (j) $\sqrt{a - b} = r$ $[b]$
   (k) $\sqrt{a - \sqrt{b}} = r$ $[a]$
   (l) $\sqrt{a - \sqrt{b}} = r$ $[b]$

2. (a) $x^2 = y$ $[x]$
   (b) $m^2 n = h$ $[m]$
   (c) $x^2 + y^2 = r^2$ $[x]$
   (d) $2c^2 d = p$ $[c]$
   (e) $(f + g)^2 = a$ $[f]$
   (f) $4m^2 + n = p$ $[m]$
   (g) $a^2 + b^2 = c$ $[a]$
   (h) $a^2 + b^2 = c$ $[b]$
   (i) $f^2 + g = a$ $[f]$
   (j) $y\left(x^2 + 2\right) = z$ $[x]$
   (k) $p^2 q^2 = r$ $[p]$
   (l) $4s^2 = p$ $[s]$

3. (a) $\sqrt{\dfrac{p}{q}} = m$ $[p]$
   (b) $\sqrt{\dfrac{p}{q}} = m$ $[q]$
   (c) $\sqrt{a^2 + b^2} = c$ $[a]$
   (d) $x + \sqrt{y} = z$ $[y]$
   (e) $\left(\dfrac{m}{n}\right)^2 = t$ $[m]$
   (f) $\left(s + \sqrt{t}\right)^2 = r$ $[t]$
   (g) $\left(v^2 + u^2\right)^2 = x$ $[v]$
   (h) $\dfrac{c^2}{\sqrt{d}} = e$ $[c]$
   (i) $\dfrac{c^2}{\sqrt{d}} = e$ $[d]$
   (j) $1 - y^2 = z^2$ $[y]$
   (k) $\dfrac{r^2}{2s} = t$ $[r]$
   (l) $2r^2 + 1 = s$ $[r]$
   (m) $(2r + 1)^2 = s$ $[r]$
   (n) $2\sqrt{r} + 1 = s$ $[r]$
   (o) $\sqrt{2r + 1} = s$ $[r]$