GENMATHS RESOURCES

REARRANGING HARDER FORMULAE

1) Make x the subject of
$$2x - 10 = bx$$

2) Make x the subject of
$$mx = n - px$$

3) Make x the subject of
$$3(x + 1) = hx$$

4) Make x the subject of
$$y + gx = ux + 2y$$

5) Make x the subject of
$$y - 5x = 3(x + 2)$$

6) Make y the subject of
$$a(y + 3) = b(y + 2)$$

7) Make z the subject of
$$3(z - c) = 2(az - 4)$$

8) Make x the subject of
$$xy = \frac{x + 2}{3}$$

9) Make x the subject of
$$y = \frac{x + 1}{x - 2}$$

10) Make w the subject of
$$y = \frac{3w + 2}{w - 1}$$

11) Make x the subject of
$$y = \frac{2x - 3}{x + 4}$$

12) Make a the subject of
$$b = \sqrt{\frac{a + 1}{2a}}$$

13) Make x the subject of
$$3a = \sqrt{\frac{2x + 3}{5x}}$$

14) Make x the subject of
$$y = \sqrt{\frac{x - 4}{x + 1}}$$

15) Make x the subject of
$$a = \frac{x - 2}{2x + 1}$$

16) Make c the subject of
$$\frac{1}{b} = \frac{1}{c} + \frac{1}{d}$$

17) Make e the subject of
$$t = \frac{2e + 7}{9 - e}$$

18) Make p the subject of
$$n = \sqrt{\frac{8p + 11}{10 + 2p}}$$

19) Make f the subject of
$$m = \sqrt{\frac{f + h}{fh - g}}$$

20) Make y the subject of
$$\frac{m}{n} = \frac{4y}{y + 9}$$

21) Make b the subject of
$$d = \frac{b + 6}{7 + b} - 2$$

22) Make m the subject of
$$r = \frac{7m^2 + 8}{10 - 2m^2}$$

Challenge

23) Make x the subject of
$$x^2 + 8x - 10 = 25 + y$$

24) Make y the subject of
$$3y^2 + 12y - b = 4a$$

25) Make x the subject of
$$x^2 - 4ax - 12 = ef + 10$$