ex. 5.4 - memo

1a) $\theta = 30°$

b) $\theta = 22,8°$

c) $\theta = 70,8°$

d) $\theta = 47°$ {46,95 .... rounded}

e) $2 \tan\theta = 1$

$\tan\theta = \frac{1}{2}$

$\theta = 26,6°$

f) $3 \cos\theta = 0,5$

$\cos\theta = \frac{1}{6}$

$\theta = 80,4°$

g) $\left(\frac{\sin\theta}{3}\right)^{3}_{1} = (0,13)$ $\times 3$

$\sin\theta = 0,39$

$\theta = 23°$

h) $\frac{3\cos\theta}{2} - 1 = 0$

$\left(\frac{3\cos\theta}{2}\right)^{2}_{1} = (1)^{3}_{1}$

$3\cos\theta = 2$

$\cos\theta = \frac{2}{3}$

$\theta = 48,2°$

1) $4 \tan(\theta - 30^\circ) = 1$

$\tan(\theta - 30^\circ) = \frac{1}{4}$

$\therefore \theta - 30^\circ = 14,0362\ldots$

$\theta = 44,0^\circ$

j) $\frac{2 \sin(\theta - 10^\circ)}{3} = 0,102$

$2 \sin(\theta - 10^\circ) = 0,306$

$\sin(\theta - 10^\circ) = 0,153$

$\therefore \theta - 10^\circ = 8,8008\ldots$

$\theta = 18,8^\circ$

k) $4 \cos 2\theta = 3,5$

$\cos 2\theta = 0,875$

$\therefore 2\theta = 28,9550\ldots$

$\theta = 14,5^\circ$

l) $\frac{\tan 2\theta}{2} = 5,102$

$\tan 2\theta = 10,204$

$\therefore 2\theta = 84,4028\ldots$

$\theta = 42,2^\circ$

m) $\frac{\sin(3\theta - 35^\circ)}{3} = 0,17$

$\sin(3\theta - 35^\circ) = 0,51$

$\therefore 3\theta - 35^\circ = 30,6638.....$

$3\theta = 65,6638.....$

$\theta = 21,9^\circ$

n) $2\tan(5\theta + 20^\circ) = 24,9$

$\tan(5\theta + 20^\circ) = 12,45^\circ$

$\therefore 5\theta + 20^\circ = 85,4077.....$

$5\theta = 65,4077.....$

$\theta = 13,1^\circ$

o) $\cos\theta = \sin 20^\circ$

$\theta = 70^\circ$

p) $\sin\theta = \tan 40^\circ$

$\theta = 57,0^\circ$