

g) 5 mi + 9 mi

$$\begin{array}{r} 9 \\ \triangle \\ 5 \end{array} \quad \begin{array}{l} 5^2 + 9^2 = c^2 \\ 106 = c^2 \\ 10.30 \text{ mi} = c \end{array}$$

1 yrd + 8 yrd

$$\begin{array}{r} 8 \\ \triangle \\ 1 \end{array} \quad \begin{array}{l} 1^2 + 8^2 = c^2 \\ 65 = c^2 \\ 8.06 \text{ yrd} = c \end{array}$$

8.4 furlong + 6.2 furlong

$$\begin{array}{r} 8.4 \\ \triangle \\ 6.2 \end{array} \quad \begin{array}{l} 8.4^2 + 6.2^2 = c^2 \\ 109 = c^2 \\ 10.44 \text{ furlong} = c \end{array}$$

h) $\frac{1}{3}$ ft + $\frac{1}{3}$ ft

$$\begin{array}{r} \frac{1}{3} \\ \triangle \\ \frac{1}{3} \end{array} \quad \begin{array}{l} (\frac{1}{3})^2 + (\frac{1}{3})^2 = c^2 \\ \frac{1}{9} + \frac{1}{9} = c^2 \\ \frac{2}{9} = c^2 \\ 0.47 = c \end{array}$$

$2\frac{1}{4}$ in + $\frac{7}{8}$ in

$$\begin{array}{r} 2\frac{1}{4} \\ \triangle \\ \frac{7}{8} \end{array} \quad \begin{array}{l} (2\frac{1}{4})^2 + (\frac{7}{8})^2 = c^2 \\ (\frac{9}{4})^2 + (\frac{7}{8})^2 = c^2 \\ \frac{81}{16} + \frac{49}{64} = c^2 \\ 2.41 \text{ in} = c \end{array}$$

$\frac{1}{2}$ ft + $\frac{3}{4}$ ft

$$\begin{array}{r} \frac{1}{2} \\ \triangle \\ \frac{3}{4} \end{array} \quad \begin{array}{l} (\frac{1}{2})^2 + (\frac{3}{4})^2 = c^2 \\ \frac{1}{4} + \frac{9}{16} = c^2 \\ \frac{13}{16} = c^2 \\ 0.90 \text{ ft} = c \end{array}$$

@ leg 4 in hyp. 5 in

$$\begin{array}{r} 4 \\ \triangle \\ a \end{array} \quad \begin{array}{l} a^2 + 4^2 = 5^2 \\ a^2 + 16 = 25 \\ -16 \quad -16 \\ \hline a^2 = 9 \\ a = 3 \text{ in} \end{array}$$

Leg 12 cm hyp. 13 cm

$$\begin{array}{r} 12 \\ \triangle \\ a \end{array} \quad \begin{array}{l} a^2 + 12^2 = 13^2 \\ a^2 + 144 = 169 \\ -144 \quad -144 \\ \hline a^2 = 25 \\ a = 5 \text{ cm} \end{array}$$

Leg 72 m hyp 97 m

$$\begin{array}{r} 72 \\ \triangle \\ a \end{array} \quad \begin{array}{l} a^2 + 72^2 = 97^2 \\ a^2 + 5184 = 9409 \\ -5184 \quad -5184 \\ \hline a^2 = 4225 \\ a = 65 \text{ m} \end{array}$$

leg 21 in hyp 29 in

$$\begin{array}{r} 21 \\ \triangle \\ b \end{array} \quad \begin{array}{l} 21^2 + b^2 = 29^2 \\ 441 + b^2 = 841 \\ -441 \quad -441 \\ \hline b^2 = 400 \\ b = 20 \text{ in} \end{array}$$

Q leg 51 in hyp. 149 in

$$\begin{array}{r} 51 \\ \triangle \\ b \end{array} \quad \begin{array}{l} 51^2 + b^2 = 149^2 \\ 2601 + b^2 = 22201 \\ -2601 \quad -2601 \\ \hline b^2 = 19600 \\ b = 140 \text{ in} \end{array}$$

Leg 84 + hyp 116 in

$$\begin{array}{r} 84 \\ \triangle \\ a \end{array} \quad \begin{array}{l} a^2 + 84^2 = 116^2 \\ a^2 + 7056 = 13456 \\ -7056 \quad -7056 \\ \hline a^2 = 6400 \\ a = 80 \text{ in} \end{array}$$

Leg 42 in + hyp 58 in

$$\begin{array}{r} 42 \\ \triangle \\ b \end{array} \quad \begin{array}{l} 42^2 + b^2 = 58^2 \\ 1764 + b^2 = 3364 \\ -1764 \quad -1764 \\ \hline b^2 = 1600 \\ b = 40 \text{ in} \end{array}$$

Leg 65 in + hyp 97 in

$$\begin{array}{r} 65 \\ \triangle \\ a \end{array} \quad \begin{array}{l} a^2 + 65^2 = 97^2 \\ a^2 + 4225 = 9409 \\ -4225 \quad -4225 \\ \hline a^2 = 5184 \\ a = 72 \text{ in} \end{array}$$

@ leg $1\frac{3}{5}$ in hyp $3\frac{3}{5}$ in

$$\begin{array}{r} 1\frac{3}{5} \\ \triangle \\ b \end{array} \quad \begin{array}{l} (1\frac{3}{5})^2 + b^2 = (3\frac{3}{5})^2 \\ 2.56 + b^2 = 11.56 \\ b^2 = 9 \\ b = 3 \text{ in} \end{array}$$

Leg 0.5 cm hyp. 1.3 cm

$$\begin{array}{l} 0.5^2 + b^2 = 1.3^2 \\ 0.25 + b^2 = 1.69 \\ b^2 = 1.44 \\ b = 1.2 \text{ cm} \end{array}$$

Leg $\frac{3}{4}$ in hyp $1\frac{1}{4}$ in

$$\begin{array}{l} (\frac{3}{4})^2 + b^2 = (1\frac{1}{4})^2 \\ 0.5625 + b^2 = 1.5625 \\ b^2 = 1 \\ b = 1 \text{ in} \end{array}$$

Leg 0.68955 m hyp 1 m

$$\begin{array}{l} (0.68955)^2 + b^2 = 1^2 \\ b = 0.72 \end{array}$$