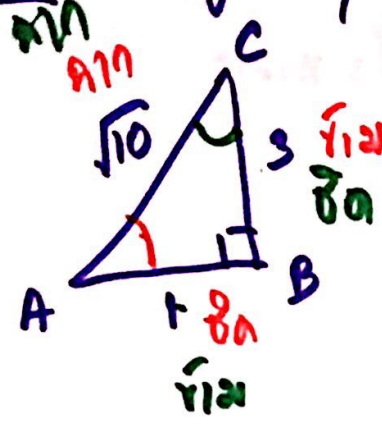


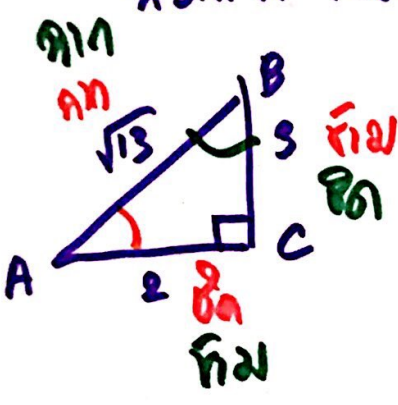
Ex 9 จงหาค่า $\sin^2 A + \cos^2 A + \tan^2 C$



$\sin A = \frac{3}{\sqrt{10}}$
 $\cos A = \frac{1}{\sqrt{10}}$
 $\tan C = \frac{1}{3}$

$\sin^2 A + \cos^2 A + \tan^2 C$
 $= \left(\frac{3}{\sqrt{10}}\right)^2 + \left(\frac{1}{\sqrt{10}}\right)^2 + \left(\frac{1}{3}\right)^2$
 $= \left(\frac{9}{10} + \frac{1}{10}\right) + \frac{1}{9} = \frac{10}{9} + \frac{1}{9} = \frac{11}{9}$

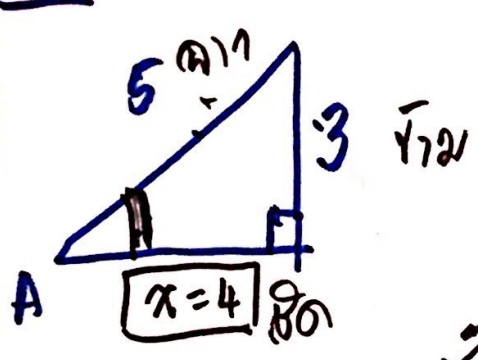
Ex 10 จงหาค่า $\sin^2 A + \cos^2 B = \frac{9}{13} \tan^2 B$



$\sin A = \frac{3}{\sqrt{13}}$
 $\cos B = \frac{3}{\sqrt{13}}$
 $\tan^2 B = \frac{2}{3}$

$x \left(\frac{3}{\sqrt{13}}\right)^2 + \left(\frac{3}{\sqrt{13}}\right)^2 = \frac{9}{13} \left(\frac{2}{3}\right)^2$
 $\frac{9x}{13} + \frac{9}{13} = \frac{9}{13} \left(\frac{4}{9}\right)$
 $\frac{9x}{13} + \frac{9}{13} = \frac{4}{13}$
 $\frac{9x}{13} = \frac{4}{13} - \frac{9}{13}$
 $\frac{9x}{13} = \frac{-5}{13}$
 $x = \frac{-5}{13} \left(\frac{13}{9}\right)$
 $x = -\frac{5}{9}$

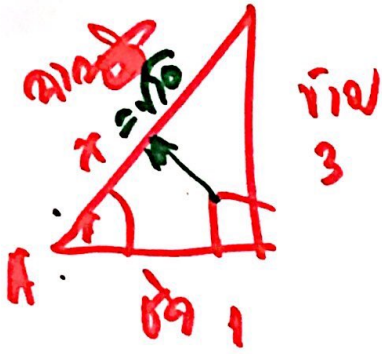
Ex 11 ΔABC ซึ่ง $\sin A = 0.6$ จงหาค่า $2 \tan A + 3 \sec A$ $x = -\frac{5}{9}$



$\sin A = \frac{3}{5}$
 $\cos A = \frac{4}{5}$
 $\tan A = \frac{3}{4}$
 $\sec A = \frac{5}{4}$

$2 \tan A + 3 \sec A$
 $= 2\left(\frac{3}{4}\right) + 3\left(\frac{5}{4}\right)$
 $= \frac{6}{4} + \frac{15}{4}$
 $= \frac{21}{4}$

EX 12 ΔABC $\tan A = 3$ จงหาค่าของ $3\sin^2 A + 4\cos^2 A$



$$x^2 = 3^2 + 1^2$$

$$x^2 = 9 + 1$$

$$x^2 = 10$$

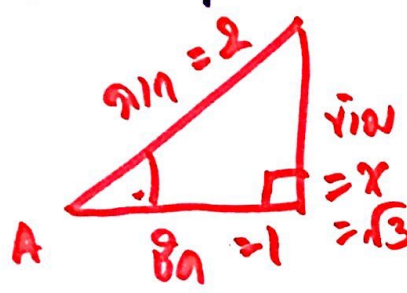
$$x = \sqrt{10}$$

$$\left. \begin{array}{l} \sin A = 3/\sqrt{10} \\ \cos A = 1/\sqrt{10} \end{array} \right\} = \frac{27}{10} + \frac{4}{10}$$

$$= \frac{31}{10}$$

$$3\sin^2 A + 4\cos^2 A = 3\left(\frac{3}{\sqrt{10}}\right)^2 + 4\left(\frac{1}{\sqrt{10}}\right)^2$$

EX 13 ΔABC $\sec A = 2$ จงหาค่าของ $\cot^2 A + \sqrt{3}\operatorname{cosec} A$



$$\cos A = 1/2$$

$$2^2 = 1^2 + x^2$$

$$4 = 1 + x^2$$

$$x^2 = 3 \therefore x = \sqrt{3}$$

มุมฉากที่ 2

$$\left. \begin{array}{l} \cot A = \frac{1}{\sqrt{3}} \\ \operatorname{cosec} A = \frac{2}{\sqrt{3}} \end{array} \right\} \cot^2 A + \sqrt{3}\operatorname{cosec} A$$

$$= \left(\frac{1}{\sqrt{3}}\right)^2 + \sqrt{3}\left(\frac{2}{\sqrt{3}}\right)$$

$$= \frac{1}{3} + \frac{2 \times 3}{3}$$

$$= \frac{7}{3}$$

ข้อสรุป 6-7 และทำแบบฝึกหัดที่ 2 เป็นทบทวน
ข้อใดตรงกับข้อสรุปนี้ เพราะ
วิธีแก้ที่ถูกต้อง