

2.

(i) $\sin x = 0.65$

$x = \sin^{-1}(0.65)$

$x = 40.54$

(ii) $7 \cos x = 4$

$\cos x = \frac{4}{7}$

$x = \cos^{-1}\left(\frac{4}{7}\right)$

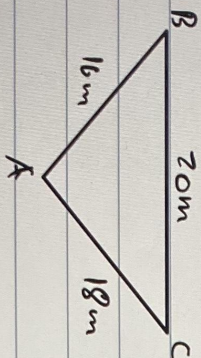
$x = 55.15$

(iii) $\tan x = -0.22$

$\tan x = -0.22$

$x = \tan^{-1}(-0.22)$

$x = 12.41$

3. find angle $\hat{A}$ 

$a^2 = b^2 + c^2 - 2bc \cos A$

$20^2 = 18^2 + 16^2 - 2(18)(16) \cos(A)$

$400 = 224 + 256 - 576 \cos(A)$

$400 - 324 - 256 = -576 \cos(A)$

$-180 = -576 \cos(A)$

$0.313 = \cos(A)$

$\cos^{-1}(0.313) = A$

$A = 71.6$