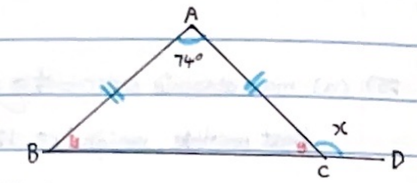
④ Ex 2.2 (Q 6, 21, 22, 24) draw figure

10th February 2026

6) ∵ AB = AC (given)

∴ ∠B = ∠C (base ∠s, isos. Δ)



74° + y + y = 180° (∠ sum of Δ)

2y = 180° - 74°

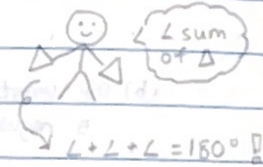
$y = \frac{106}{2}$

y = 53°

x + y = 180° (adj. ∠s on st. line)

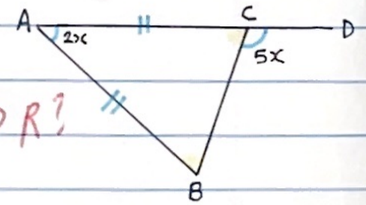
x + 53° = 180°

∴ x = 127°



21) ∵ AC = AB (given)

∴ ∠B = ∠ACB (base ∠s, isos. Δ)



∠ACB + 5x = 180° (adj. ∠s on st. line

∠ACB = 180° - 5x

2x + 180° - 5x + 180° - 5x = 180° (∠ sum of Δ)

-8x + 360° = 180°

360° - 180° = 8x

$x = \frac{360-180}{8}$

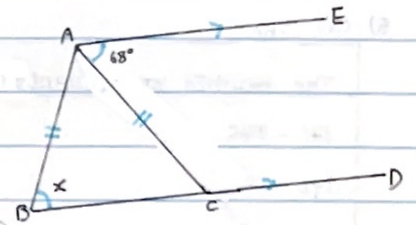
∴ x = 22.5°

22) ∵ AB = AC (given)

∠EAC = ∠ACB = 68° (alt. ∠s, AE // BD)

[∵ x = ∠ACB (base ∠s, isos. Δ)]

∴ x = 68°



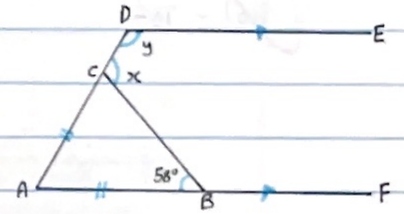
24) ∵ AC = AB (given)

∠ACB = ∠CBA = 58° (base ∠s, isos. Δ)

x + ∠ACB = 180° (adj. ∠s on st. line)

x = 180° - 58°

∴ x = 122°



∵ ∠A + ∠ACB + ∠CBA = 180° (∠ sum of Δ)

∠A + 58° + 58° = 180°

∠A = 180° - 58° - 58°

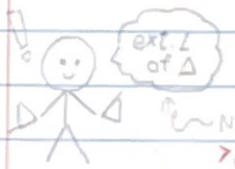
∠A = 64°

∵ y + ∠A = 180° (int. ∠s, DE // AF)

y + 64° = 180°

y = 180° - 64°

∴ y = 116°



V. good!

12 FEB 2026