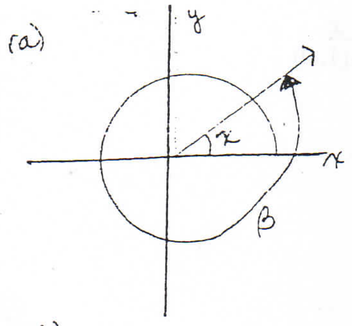
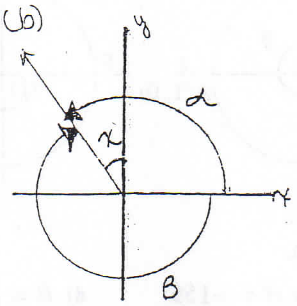
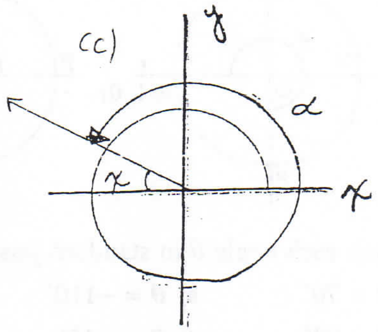
Trigonometric Functions

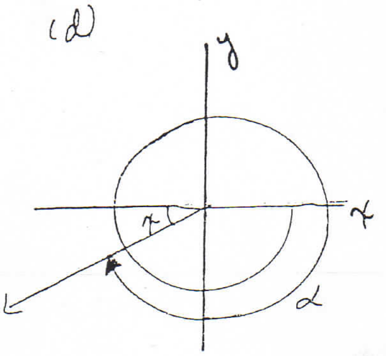
Co-terminal Angles

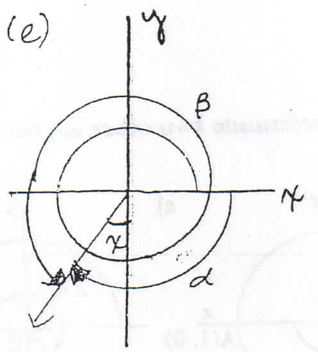
1. Given $x = 40°$, state the measure of rotation of angles α and β in each of the of the following

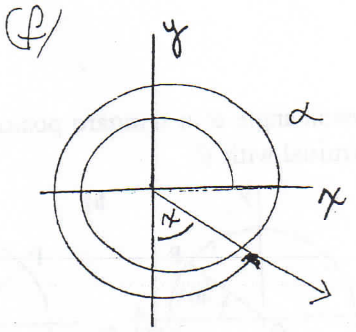










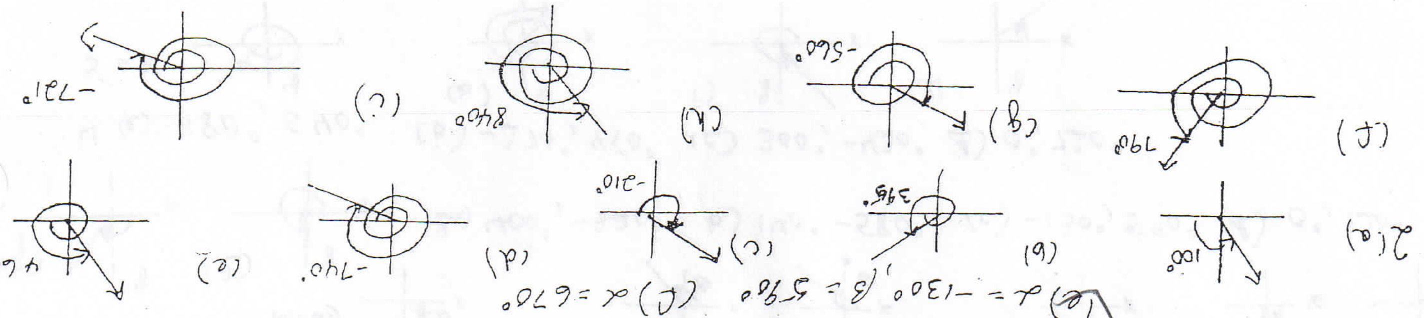


2. Draw a rotation angle with each of the following measures. Make sure your angle is clearly marked in the diagram.

(a) 100°　　(d) -740°　　(g) -560°

(b) 395°　　(e) 460°　　(h) 840°

(c) -210°　　(f) 790°　　(i) -721°

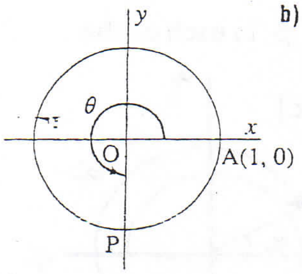


Answers: 1(a) 400° (b) α = 130° β = -230° (c) α = 500° (d) α = -500°
(e) α = -130°, β = 590° (f) α = 670°

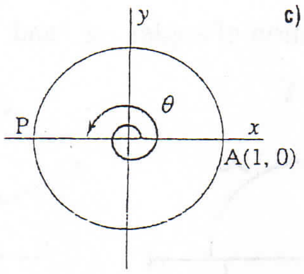
A

1. For each angle in standard position, determine θ in degrees.

a)



b)



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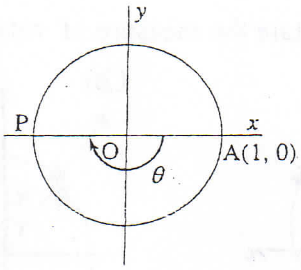


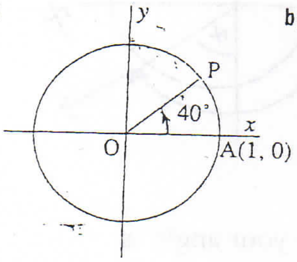
2. Sketch each angle θ in standard position.

a) $\theta = 70°$ b) $\theta = -110°$ c) $\theta = -155°$ d) $\theta = 220°$

e) $\theta = 90°$ f) $\theta = -45°$ g) $\theta = 120°$ h) $\theta = -270°$

3 For each angle θ in standard position, determine two other angles that are coterminal with θ.

a)



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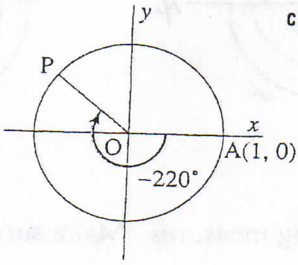

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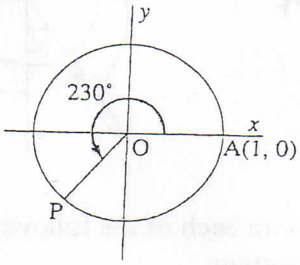


4. Determine two angles that are coterminal with each angle θ.

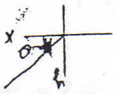
a) $\theta = 180°$ b) $\theta = 90°$ c) $\theta = -60°$ d) $\theta = 360°$

5. Sketch each angle θ in standard position.

a) $\theta = 500°$ b) $\theta = 650°$ c) $\theta = -300°$ d) $\theta = -80°$

Answers(?) 1.(a) 270° (b) 540° (c) −180°

2(a)



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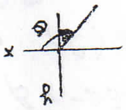
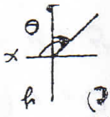
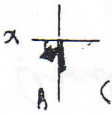


(c)

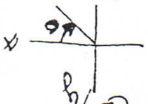


(d)

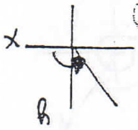
(e)



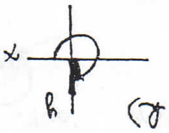
(f)



(g)



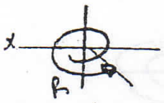
(h)



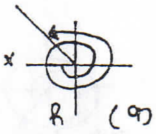
3a) 400°, −320° b) 140°, −580° (c) −130°, 590° (d) 0°, 720°

4. (a) −180°, 540° (b) −270°, 450° (c) 300°, −420° d) 0°, 720°

5 a)



(b)



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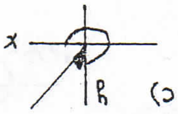

d)