Advanced Trig Ratios

1. If $\cos\theta = \dfrac{12}{13}$ and θ is in Quadrant I, find:

a) $\cos\theta$ b) $\sin\theta$ c) $\tan\theta$

d) $\sec\theta$ e) $\csc\theta$ f) $\cot\theta$

2. If $\sin\theta = -\dfrac{3}{5}$ and θ is in Quadrant III, find:

a) $\cos\theta$ b) $\sin\theta$ c) $\tan\theta$

d) $\sec\theta$ e) $\csc\theta$ f) $\cot\theta$

3. If $\tan\theta = \dfrac{24}{7}$ and θ is in Quadrant III, find:

a) $\cos\theta$ b) $\sin\theta$ c) $\tan\theta$

d) $\sec\theta$ e) $\csc\theta$ f) $\cot\theta$

4. If $\sin\theta = \dfrac{5}{8}$ and θ is in Quadrant II, find:

a) $\cos\theta$ b) $\sin\theta$ c) $\tan\theta$

d) $\sec\theta$ e) $\csc\theta$ f) $\cot\theta$

5. Angle θ is in standard position and $(3,4)$ is a point on the terminal side of θ. Find:

a) $\cos\theta$ b) $\sin\theta$ c) $\tan\theta$

d) $\sec\theta$ e) $\csc\theta$ f) $\cot\theta$

6. Angle θ is in standard position and $(4,-7)$ is a point on the terminal side of θ. Find:

a) $\cos\theta$ b) $\sin\theta$ c) $\tan\theta$

d) $\sec\theta$ e) $\csc\theta$ f) $\cot\theta$

7. Angle θ is in standard position and $(-5,-12)$ is a point on the terminal side of θ. Find:

a) $\cos\theta$ 　　　　　　 b) $\sin\theta$ 　　　　　　 c) $\tan\theta$

d) $\sec\theta$ 　　　　　　 e) $\csc\theta$ 　　　　　　 f) $\cot\theta$

8. Angle θ is in standard position and $(-2,3)$ is a point on the terminal side of θ. Find:

a) $\cos\theta$ 　　　　　　 b) $\sin\theta$ 　　　　　　 c) $\tan\theta$

d) $\sec\theta$ 　　　　　　 e) $\csc\theta$ 　　　　　　 f) $\cot\theta$