Name _____ Trig Review Sheet

I, Evalvate - Write answer as a simplified fraction (No Decimals)

① $\cot\left(\frac{5\pi}{6}\right)$ $-\sqrt{3}$

② $\sec\left(\frac{5\pi}{4}\right)$ $-\sqrt{2}$

③ $\sin(\pi)$ 0

④ $\cos\left(-\frac{\pi}{2}\right)$ 0

⑤ $\tan\left(-\frac{3\pi}{4}\right)$ 1

⑥ $\csc\left(\frac{4\pi}{3}\right)$ $-\frac{2\sqrt{3}}{3}$

⑦ $\sin(2\pi)$ 0

⑧ $\cot(\pi)$ undefined

⑨ $\sec\left(\frac{11\pi}{6}\right)$ $\frac{2\sqrt{3}}{3}$

⑩ $\tan(-330^\circ)$ $\frac{\sqrt{3}}{3}$

⑪ $\csc\left(\frac{2\pi}{3}\right)$ $\frac{2\sqrt{3}}{3}$

⑫ $\cos(\pi)$ -1

II. Solve the trig Equation, Write answer as a simplified fraction (no decimals) $0 \le x \le 2\pi$

⑬ $2\sin x - 1 = 0$

$x = \frac{\pi}{6}, \frac{5\pi}{6}$

⑭ $\sin x + \sqrt{2} = -\sin x$

$x = \frac{5\pi}{4}, \frac{7\pi}{4}$

(15) $3\tan^3 x = \tan x$

$x = \pi/6, 5\pi/6, 7\pi/6, 11\pi/6$, and 2π

(16) $\csc^2 x - 2 = 0$

$x = \pi/4, 3\pi/4, 5\pi/4, 7\pi/4$

(17) $\sin x = 1/2$

$x = \pi/6, 5\pi/6$

III. Use the Law of sines or law of cosines to determ all sides and angles. Law of sines

$$\frac{a}{\sin A} = \frac{b}{\sin B}$$

Law of cosines

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

(18) $C = 102.3°, B = 28.7°, b = 27.4$ $A = 49°$ $a = 43.06$ $c = 55.75$

(19) $A = 43°$ $B = 90°$ $c = 22$

(a) 23.84 (b) 34.62 $C = 39°$

(20) $A = 115°$ $c = 10$ $b = 15$

$a = 21.26$ $B = 25.25°$ $C = 42.75$

(21) $a = 8$ $b = 19$ $c = 14$ $A = 22.08$ $B = 116.8$ $C = 41.12$

IV. Determine the a) amplitude b) period [redacted]

(22) $y = 2\cos\left(\frac{x}{4}\right)$ $a = 2$ $p = 8\pi$

(23) $\frac{3}{4}\cos\frac{\pi x}{12}$ $a = 3/4$ $p = 24$

(24) $3\sin(4\pi x)$ $a = 3$ $p = 1/2$