<u>Instructions</u>

- **Complete the problems as if this were an actual test.**
  - **70-80 minutes of <u>uninterrupted</u> time.** (this means no phones, Netflix, snapchat, etc….I promise you will survive😊)
  - **Don't use your calculator on the NonCalc problems**
  - **No help from notes, friends, google, etc.**

- **After you have completed the problems, grade your test using the key provided.**

- **Try extra problems, similar to the ones you missed, until you feel like you understand those concepts.**
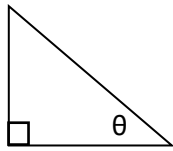
Non-Calculator

1. Find one positive and one negative angle coterminal to $\frac{7\pi}{5}$

2. Evaluate the following.
    a. $\sin 150°$
    b. $\cos 240°$
    c. $\tan 90°$

    d. $\csc \frac{7\pi}{4}$
    e. $\sec \left(-\frac{\pi}{3}\right)$
    d. $\cot \pi$

3. Evaluate the following. Give angle measures as degrees.
    a. $\arcsin \left(\frac{\sqrt{3}}{2}\right)$
    b. $\arccos \left(\frac{-\sqrt{2}}{2}\right)$
    c. $\arctan 0$

    d. $\sin \left(\arccos \left(\frac{-\sqrt{3}}{2}\right)\right)$
    e. $\cos(\arcsin(1))$

4. Solve for θ.
    a. $\sin \theta = -\frac{1}{2}$ $0° \leq \theta < 360°$

    b. $\cos \theta = -\frac{\sqrt{2}}{2}$ $0° \leq \theta < 360°$

    c. $\tan \theta = -\sqrt{3}$ $0 \leq \theta < 2\pi$
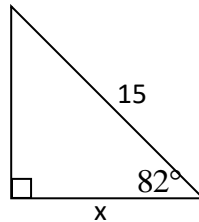
CALCULATOR.

5. Convert 5 radians to degrees. Round to 2 decimal places.

6. If $\tan \theta = \frac{8}{11}$, find $\csc \theta$.

7. If θ in standard position contains the point (5, 12) find $\sin \theta, \cos \theta$, and $\tan \theta$.

8. Solve for x. **Round your answer to 2 decimal places.**

9. Your cat is stuck in a tree, 20 feet off the ground. If you want to place your ladder so it makes a 35° angle with the ground, how long does your ladder need to be?

10. Solve for θ. Round answers to 2 decimal places.
   a. $\tan \theta = 2.539$ $\qquad 0° \leq \theta < 360°$

   b. $\cos \theta = -0.621$ $\qquad 0 \leq \theta < 2\pi$