§5.3 429:27-40. (1) Graph over one period (start the period at the phase shift). (2) List the x-intercepts. (3) List both coordinates of the highest and lowest points. (4) Give the period and phase shift. Hint: one phase shift is positive, one is negative.

1(5), \( y = \sin(2x - \frac{\pi}{2}) \) First rewrite in the form \( A \sin(B(x \pm C)) \).

\[ y = \]

\[ x \text{-intercepts:} \]

max point (chk=3):

min point (chk=1):

2(5), \( y = 3 \sin(\frac{1}{2}x + \frac{\pi}{6}) \) Rewrite: \( y = \)

\[ x \text{-intercepts:} \]

max points (chk=8):

min point (chk=14):

(1) Graph over one period. (2) List the x-intercepts. (3) List the vertical asymptotes. In 3 and 4 choose the period to include the origin and to be between the asymptotes.

3(3), \( y = \tan(x - \frac{\pi}{3}) \) Center the period at the phase shift.

\[ x \text{-intercept (chk=3):} \]

vertical asymptotes:

§5.4 441: 1-52.

4(3), \( y = -2 \tan(\pi x) \) Center the period at the phase shift.

\[ x \text{-intercept:} \]

vertical asymptotes (chks= 3, 3):

5(3) Put (a) and (b) on the same graph.
First rewrite with the argument in the form: \( B(x \pm C) \)

(a) \( y = \cos(3x + \frac{\pi}{3}) \) \( y = \)

(b) \( y = \sec(3x + \frac{\pi}{3}) \) \( y = \)

\[ \cos(3x + \pi/3): \quad x \text{-intercepts:} \]

\[ \sec(3x + \pi/3): \quad \text{vertical asymptotes:} \]

Check your graphs at https://www.desmos.com/calculator