1. Convert 30° to radian measure
   exact answer using π: 3 symbols, chk=6
   two-place decimal answer: 3 symbols, chk=7
2. Convert 150° to radian measure
   exact answer using π: 4 symbols, chk=11
   two-place decimal answer: 4 symbols, chk=10
3. Convert 3π radians to degrees
   4 symbols, chk=9
4. Convert 3π/2 radians to degrees
   4 symbols, chk=9

§6.1 475:49-56, 77-80.
5. Find the radian measure of an angle which intercepts a
   2 cm arc on a circle of radius 3 cm? Exact answer.
   3 symbols+units, chk=5
6. Find the length of an arc which is intercepted by a π/5
   radian angle on a circle of radius 12 cm? Exact answer.
   5 symbols + units, chk=8
7. A point rotates around a circle of radius 20 cm at 15
   revolutions/sec.
   (a) Find its angular speed ω. Give the exact answer using π.
       ω = 3 symbols + units, chk=3
   (b) Find its linear speed. Give the exact answer using π.
       4 symbols + units, chk=6

8. Sketch π/6, -π/6 and -5π/6 in standard position, all
   on the same graph.

§5.2 416:3-8, 23-26.
   4 integers, 2 undefined
   \[\begin{array}{cc}
   \sin(-\pi/2) = & \csc(-\pi/2) = \\
   \cos(-\pi/2) = & \sec(-\pi/2) = \\
   \tan(-\pi/2) = & \cot(-\pi/2) = \\
   \end{array}\]

10. Find the six trigonometric functions of 4π.
    4 integers, 2 undefined
    \[\begin{array}{cc}
    \sin(4\pi) = & \csc(4\pi) = \\
    \cos(4\pi) = & \sec(4\pi) = \\
    \tan(4\pi) = & \cot(4\pi) = \\
    \end{array}\]

11. A point (x,y) on the unit circle and on the terminal
    side of an angle θ is in the fourth quadrant.
    Find the six trigonometric functions if x = 1/3.
    4 answers have a radical, give exact answers, not decimals.
    \[\begin{array}{cc}
    \sin \theta = & \csc \theta = \\
    \cos \theta = & \sec \theta = \\
    \tan \theta = & \cot \theta = \\
    \end{array}\]

12. A point (x,y) on the unit circle and on the terminal
    side of an angle θ is in the first quadrant.
    Find the six trigonometric functions if x = 3/5.
    Rational answers, give exact answers, not decimals.
    Use improper fractions, not mixed fractions. E.g. 3/2, not 1½.
    \[\begin{array}{cc}
    \sin \theta = & \csc \theta = \\
    \cos \theta = & \sec \theta = \\
    \tan \theta = & \cot \theta = \\
    \end{array}\]

13. Complete the table. Mark “+” where the functions are
    positive, “-” where they are negative.
    \[\begin{array}{cccc}
    \cos \theta, \sec \theta & \sin \theta, \csc \theta & \tan \theta, \cot \theta \\
    \text{Quad I} & \text{Quad II} & \text{Quad III} & \text{Quad IV} \\
    \end{array}\]