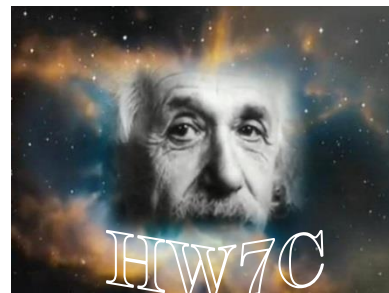


Determine if the value of the following expressions is 0, 1 or -1.

- |                     |                          |                       |                     |
|---------------------|--------------------------|-----------------------|---------------------|
| 1) $\sin 180^\circ$ | 2) $\sin 270^\circ$      | 3) $\sin (-90^\circ)$ | 4) $\sin 360^\circ$ |
| 5) $\sin (-\pi)$    | 6) $\sin \frac{3\pi}{2}$ | 7) $\cos 2\pi$        | 8) $\sin 3\pi$      |



Name each quadrant (I, II, III, or IV) described.

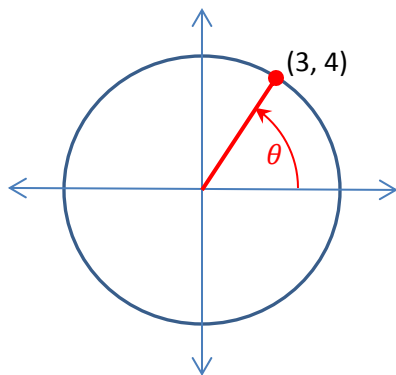
- |  |   |
|--|---|
| 9) $\sin \theta > 0, \cos \theta < 0$  | 10) $\sin \theta < 0, \cos \theta < 0$              |
| 11) $\sin \theta > 0, \cos \theta > 0$ | 12) $\sin \theta > 0, \sin (90^\circ + \theta) > 0$ |

Determine if the value of the following expressions is positive, negative, or zero.

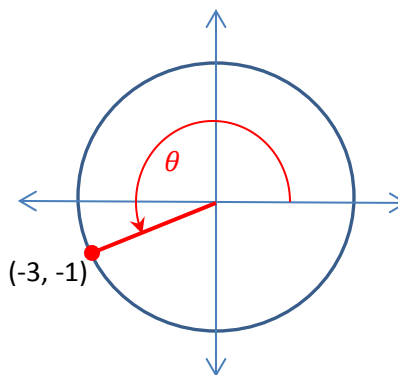
- |                           |                           |                      |                           |                           |
|---------------------------|---------------------------|----------------------|---------------------------|---------------------------|
| 13) $\sin 4\pi$           | 14) $\cos \frac{7\pi}{6}$ | 15) $\cos 3\pi$      | 16) $\sin \frac{2\pi}{3}$ | 17) $\sin 60^\circ$       |
| 18) $\cos (-120^\circ)$   | 19) $\cos 34^\circ$       | 20) $\sin 135^\circ$ | 21) $\sin \frac{7\pi}{4}$ | 22) $\sin -\frac{\pi}{6}$ |
| 23) $\cos -\frac{\pi}{3}$ | 24) $\sin \frac{\pi}{6}$  | 25) $\cos 89^\circ$  | 26) $\cos 91^\circ$       | 27) $\sin (-1^\circ)$     |

Find  $\sin \theta$  and  $\cos \theta$ .

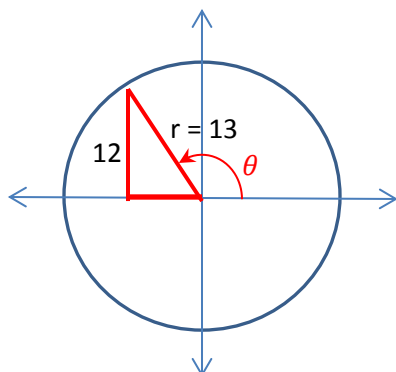
28)



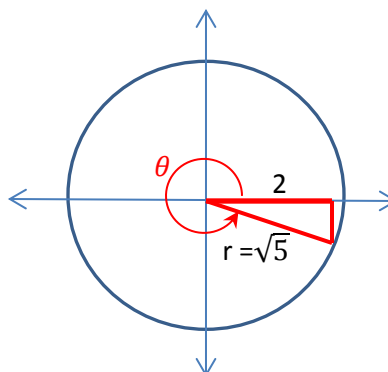
29)



30)



31)



- |       |         |       |  |
|-------|---------|-------|--|
| 1) 0  | 9) II   | 17) P | 25) P                                  |
| 2) -1 | 10) III | 18) N | 26) N                                  |
| 3) -1 | 11) IV  | 19) P | 27) N                                  |
| 4) 0  | 12) I   | 20) P | 28) $4/5$ ; $3/5$                      |
| 5) 0  | 13) 0   | 21) N | 29) $-\sqrt{10}/10$ ; $-3\sqrt{10}/10$ |
| 6) -1 | 14) N   | 22) N | 30) $12/13$ ; $-5/13$                  |
| 7) 1  | 15) N   | 23) P | 31) $-\sqrt{5}/5$ ; $2\sqrt{5}/5$      |
| 8) 0  | 16) P   | 24) P |  |