

1.(1 pt) Decide if the points given in polar coordinates are the same. If so, enter T. If not, enter F.

$(2, \frac{\pi}{3}), (-2, -\frac{\pi}{3})$  \_\_\_\_\_

$(2, \frac{19\pi}{4}), (2, -\frac{19\pi}{4})$  \_\_\_\_\_

$(0, 2\pi), (0, \frac{2\pi}{4})$  \_\_\_\_\_

$(1, \frac{37\pi}{4}), (-1, \frac{\pi}{4})$  \_\_\_\_\_

$(9, \frac{50\pi}{3}), (-9, -\frac{\pi}{3})$  \_\_\_\_\_

$(2, 8\pi), (-2, 8\pi)$  \_\_\_\_\_

2.(1 pt) For each set of Cartesian coordinates  $(x, y)$ , match the equivalent set of Polar coordinates  $(r, \theta)$ , with  $-\pi \leq \theta \leq \pi$

- 1.  $(-7.4, 1.9)$
- 2.  $(-6.9, 5.6)$
- 3.  $(4.4, 2.4)$
- 4.  $(5.8, 5.1)$
- A.  $(5.0120, 0.4993)$
- B.  $(7.6400, -0.2513)$

- C.  $(7.7233, 0.7213)$
- D.  $(8.8865, -0.6818)$

3.(1 pt) For each set of Polar coordinates, match the equivalent Cartesian coordinates.

- 1.  $(4.0311, 1.4464)$
- 2.  $(9.2309, 0.4006)$
- 3.  $(10.3470, 0.4074)$
- 4.  $(-8.7000, -0.8098)$
- 5.  $(-7.2035, -0.2382)$
- 6.  $(-9.7082, -1.3633)$
- A.  $(9.5, 4.1)$
- B.  $(-2, 9.5)$
- C.  $(8.5, 3.6)$
- D.  $(-6, 6.3)$
- E.  $(0.5, 4)$
- F.  $(-7, 1.7)$