

Write Polar Equations of Conics

Name in English

If $e = 2$ and directrix is $y = 3$, Find the followings.

1. Identify the type of Conic.

- a) Circle
- b) Parabola
- c) Ellipse
- d) Hyperbola

2. Where the directrix will lies?

- a) Above the pole
- b) Below the pole
- c) Right of the pole
- d) Left of the pole.

3. Identify the type of polar equation.

- a) $r = \frac{ed}{1 + e \cos \theta}$
- b) $r = \frac{ed}{1 - e \cos \theta}$
- c) $r = \frac{ed}{1 + e \sin \theta}$
- d) $r = \frac{ed}{1 + e \sin \theta}$

4. Identify the answer.

- a) $r = \frac{6}{1 + \cos \theta}$
- b) $r = \frac{6}{1 + 2 \sin \theta}$
- c) $r = \frac{6}{1 - \sin \theta}$
- d) $r = \frac{6}{1 + 2 \cos \theta}$

If $e = 1$ and directrix is $x = 2$, Find the followings.

1. Identify the type of Conic.

- a) Circle
- b) Parabola
- c) Ellipse
- d) Hyperbola

2. Where the directrix will lies?

- a) Above the pole
- b) Below the pole
- c) Right of the pole
- d) Left of the pole.

3. Identify the type of polar equation.

a) $r = \frac{ed}{1 + e \cos \theta}$

b) $r = \frac{ed}{1 - e \cos \theta}$

c) $r = \frac{ed}{1 + e \sin \theta}$

d) $r = \frac{ed}{1 + e \sin \theta}$

4. Identify the answer.

a) $r = \frac{2}{1 + \cos \theta}$

b) $r = \frac{6}{1 + 2 \sin \theta}$

c) $r = \frac{6}{1 - \sin \theta}$

d) $r = \frac{2}{1 - \cos \theta}$