

PRECALCULUS — RELEASED FORM



- 1 What are the **approximate** rectangular coordinates for the point with polar coordinates $(5, 30^\circ)$?
- A $(2.5, 2.89)$
 - B $(2.5, 4.33)$
 - C $(2.89, 4.33)$
 - D $(4.33, 2.5)$

Answer is shown below.

6 Two functions are shown below.

$$T(x) = -x$$

$$P(x) = 10x + 2$$

What is the value of $P(T(3)) - T(P(3))$?

A 8

B 4

C 0

D -4

7 A piecewise function is shown below.

$$f(x) = \begin{cases} cx + 1, & x \leq 2 \\ cx^2 - 1, & x > 2 \end{cases}$$

For what value of c does $\lim_{x \rightarrow 2} f(x)$ exist?

A -2

B -1

C 1

D 4