Part 1 (Objective Type): Select all that are true.

1. **Which of the following is equal to $\boldsymbol{\Phi(2.3)}$?**

   (a) $\int_{-\infty}^{2.3} \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}z^2} dz$

   (b) $P(Z < 2.3)$

   (c) $P(Z \leq 2.3)$

   (d) $P(0 < Z < 2.3)$

   (e) $P(-\infty < Z < 2.3)$

2. $\boldsymbol{\Phi(-2.3)} =$

   (a) $P(X < -2.3)$

   (b) $1 - \Phi(2.3)$

   (c) $P(-\infty < Z < -2.3)$

   (d) $= 1 - P(-\infty < Z < 2.3)$

   (e) $1 - P(Z > 2.3)$

3. $\boldsymbol{P(-2 < X < 2)} =$

   (a) $P(-2 < Z < 2)$

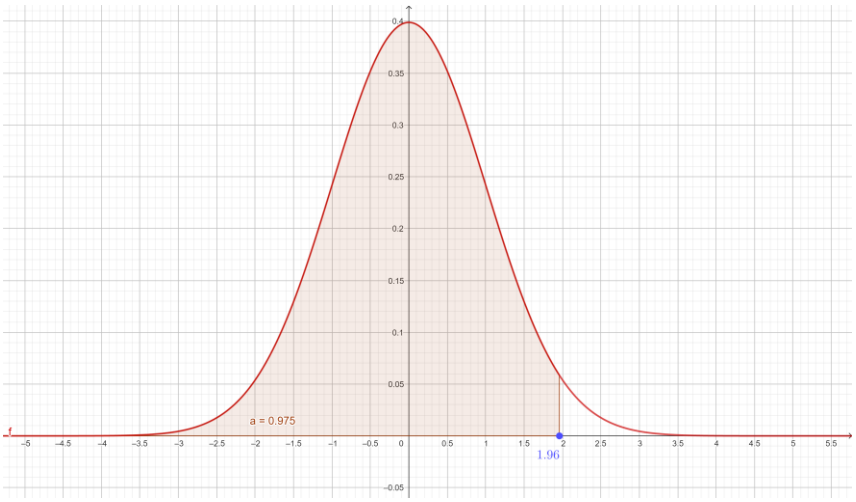
   (b) $\Phi(2) - \Phi(-2)$

   (c) $F(2) - F(-2)$

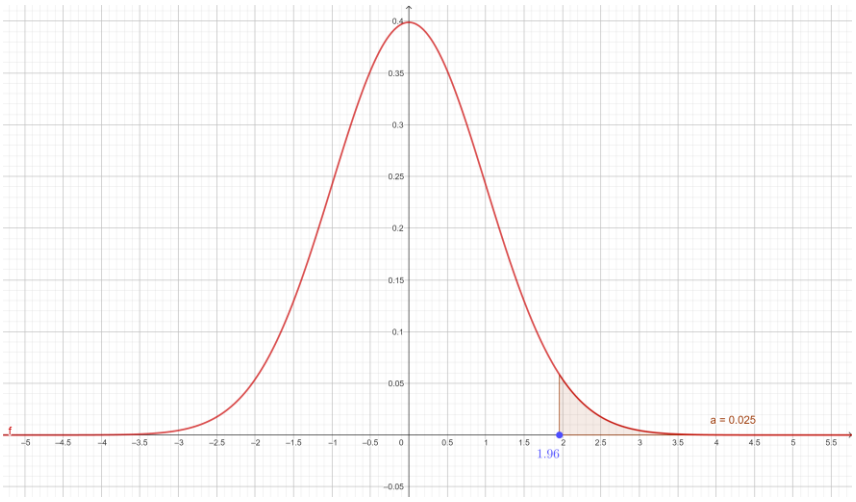
   (d) $\int_{-2}^{2} \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{X-\mu}{\sigma}\right)^2} dx$

   (e) $P(X < 2) - P(X < -2)$

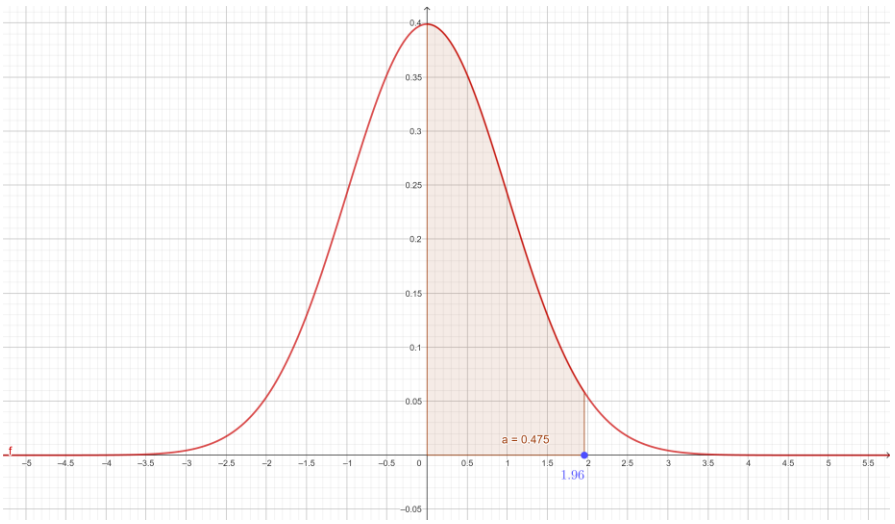
4. Which Area represents $\Phi(1.96)$?



(a)



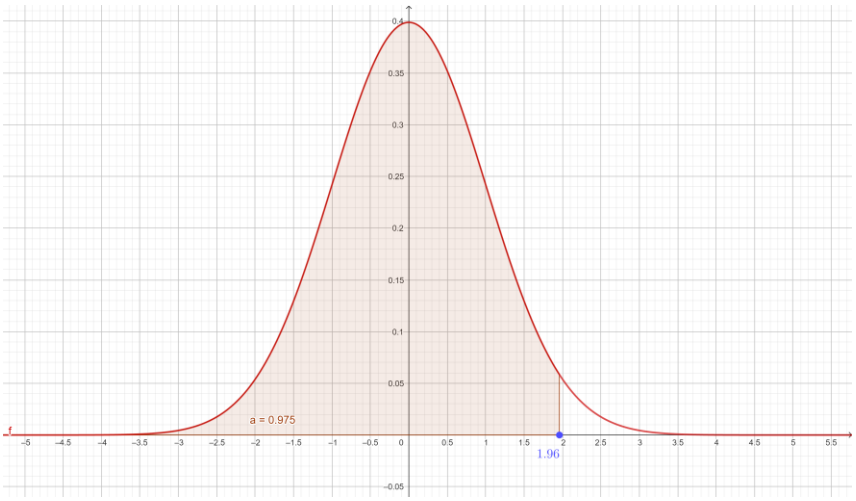
(b)



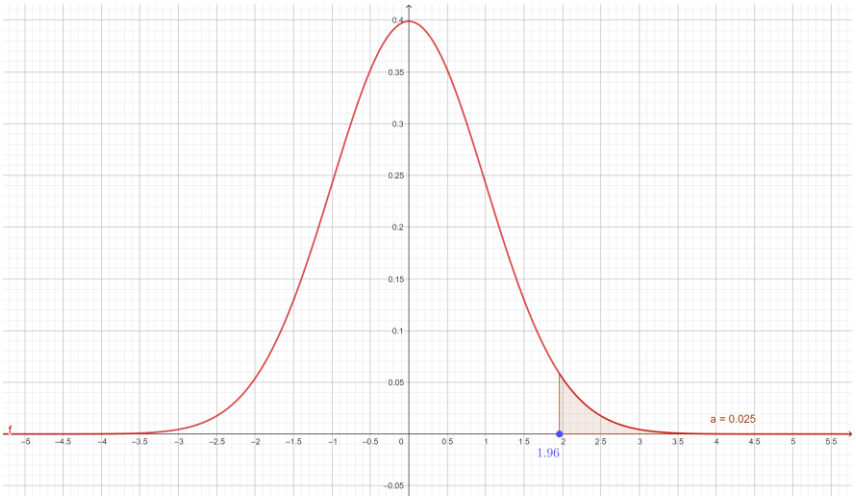
(c)

5. In CASIO Calculator, **MODE > STAT > AC > SHIFT > 1 > Distr > P(1.96)** , used for calculating which of the following area?

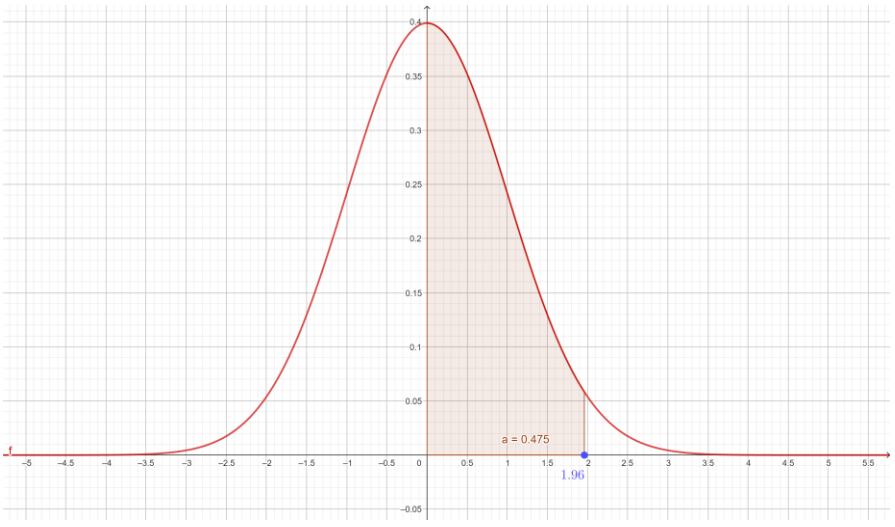
(a)



(b)

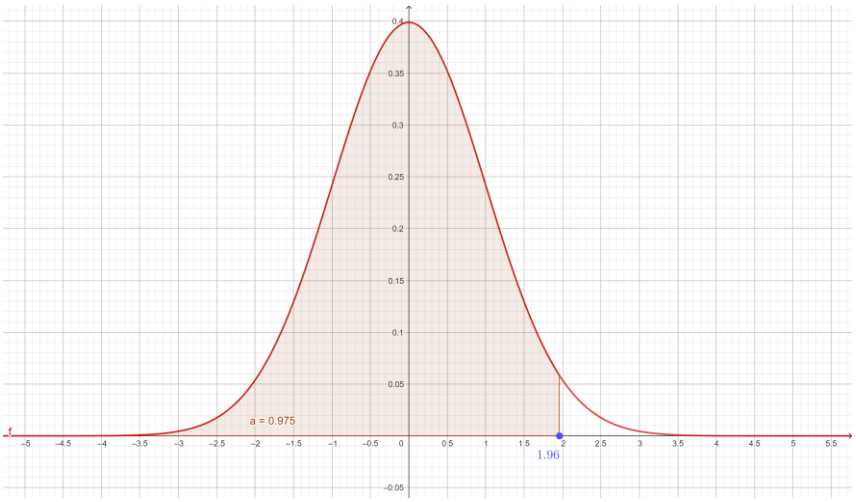


(c)

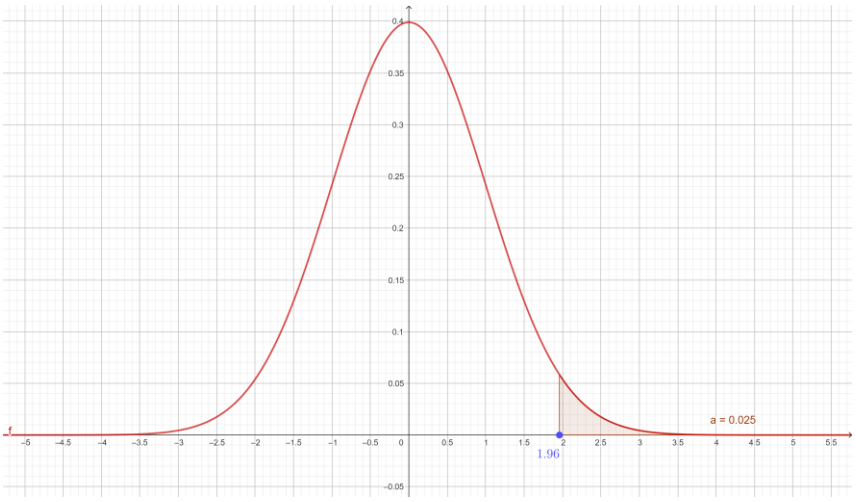


6. In CASIO Calculator, **MODE > STAT > AC > SHIFT > 1 > Distr > Q(1.96)** , used for calculating which of the following area?

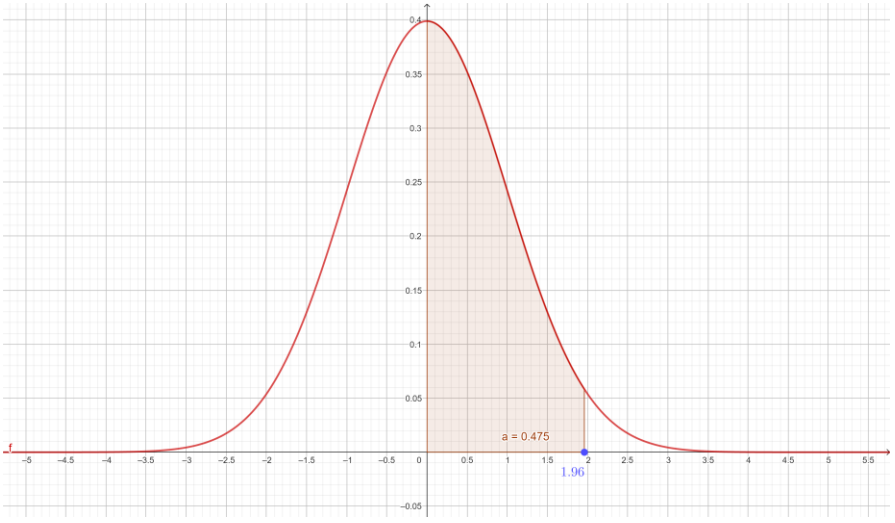
(a)



(b)

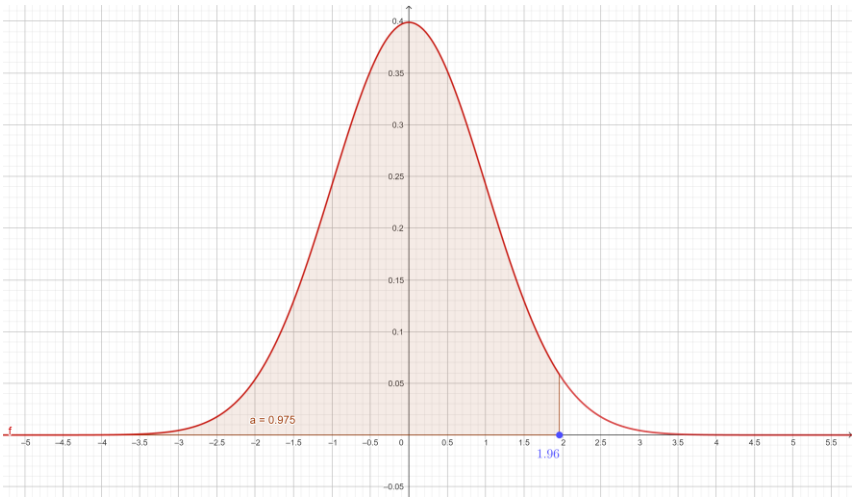


(c)

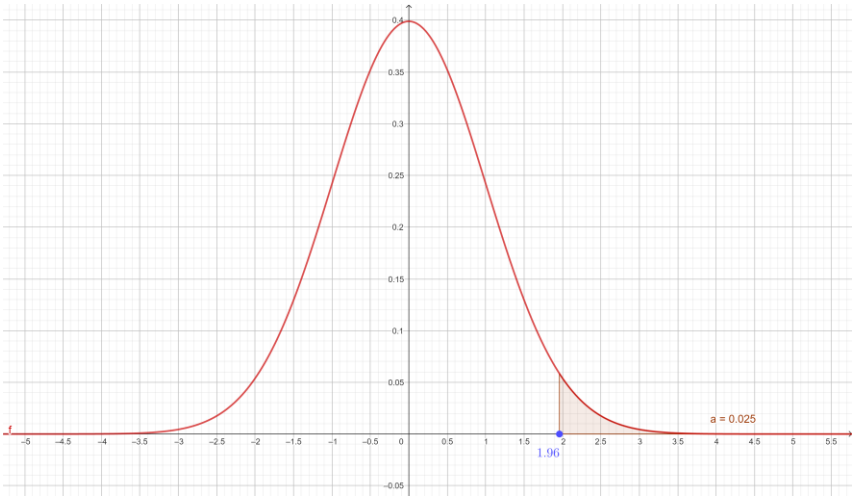


7. In CASIO Calculator, **MODE > STAT > AC > SHIFT > 1 > Distr > R(1.96)** , used for calculating which of the following area?

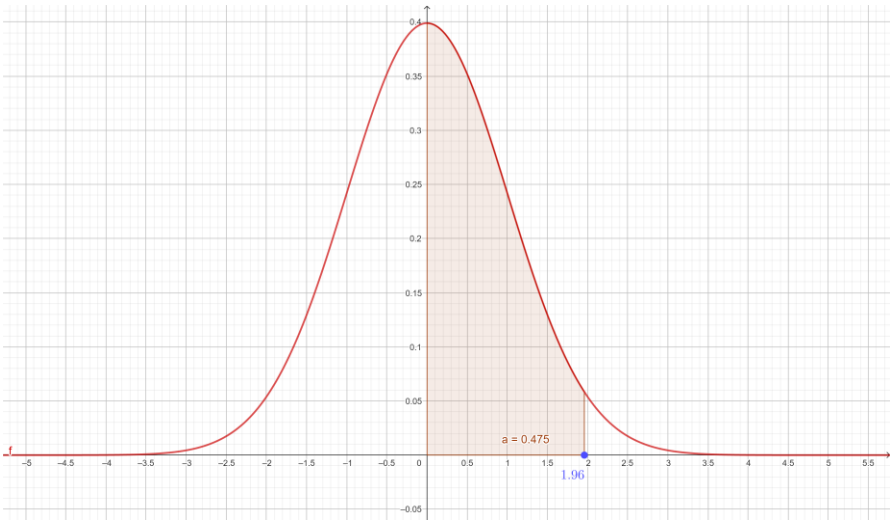
(a)



(b)



(c)



8. Which of the following CASIO Function is equivalent to $\Phi(2)$?

   (a) **MODE > STAT > AC > SHIFT > 1 > Distr > R(2)**

   (b) **MODE > STAT > AC > SHIFT > 1 > Distr > P(2)**

   (c) **MODE > STAT > AC > SHIFT > 1 > Distr > Q(2)**

9. Which of the following CASIO Function is equivalent to $1 - \Phi(2)$?

   (a) **MODE > STAT > AC > SHIFT > 1 > Distr > R(2)**

   (b) **MODE > STAT > AC > SHIFT > 1 > Distr > P(2)**

   (c) **MODE > STAT > AC > SHIFT > 1 > Distr > Q(2)**

10. Which of the following CASIO Function is equivalent to $P(0 < Z < 2)$?

    (a) **MODE > STAT > AC > SHIFT > 1 > Distr > R(2)**

    (b) **MODE > STAT > AC > SHIFT > 1 > Distr > P(2)**

    (c) **MODE > STAT > AC > SHIFT > 1 > Distr > Q(2)**

11. Fill in the blanks.

(a) $\Phi(-\infty) =$ _____ (b) $\Phi(+\infty) =$ _____ (c) $\Phi(0) =$ _____

12. $\boldsymbol{\Phi(2.324)}$ and $\boldsymbol{\Phi^{-1}(0.7865)}$ must be calculated through _____ when we are using statistical tables for standard normal distribution instead of using direct calculations from machine or evaluating definite integral.

(a) Iteration

(b) Interpolation

(c) Simulation

(d) Binomial Theorem