

Sujet B p 197**Partie A**

1. $P(X < 0) = \frac{0 - (-3)}{5 - (-3)} = \frac{3}{8}$, réponse c.
2. $P(X \geq 3) = \frac{5 - 3}{5 - (-3)} = \frac{2}{8} = \frac{1}{4} = 0,25$, réponse a.
3. $E(X) = \frac{-3 + 5}{2} = \frac{2}{2} = 1$, réponse b.

Partie b

1. $P(1 < Y < 2) \approx 0,1359$, réponse c.
2. $P(Y < 0,8) \approx 0,7881$, réponse b.
3. $P(Y > -1,45) \approx 0,9265$, réponse a.
4. $P(Y < k) = 0,35$, $k \approx -0,3853$, réponse b.
- 5.

$$P(-d < Y < d) = 0,6$$

$$2P(Y < d) - 1 = 0,6$$

$$2P(Y < d) = 1,6$$

$$P(Y < d) = 0,8$$

$d \approx 0,8416$, réponse c.

Ex 1 de la fiche

$X : \mu = 180, \sigma = 10,5$

1. $P(170 \leq X \leq 200) \approx 0,801$

$$P(X \leq 150) \approx 0,002$$

$$P(X \geq 160) \approx 0,972$$

$$P(X \geq 190) \approx 0,170$$

2. $a \approx 192,079$

- 3.

$$P(X \geq b) = \frac{3}{4}$$

$$1 - P(X < b) = \frac{3}{4}$$

$$-P(X < b) = \frac{3}{4} - 1$$

$$-P(X < b) = -\frac{1}{4}$$

$$P(X < b) = \frac{1}{4}$$

$b \approx 172,918$