

S5E-4A

1. (a) $\begin{cases} x = -2 \\ y = -1 \end{cases}$
(b) $\begin{cases} x = 2 \\ y = 3 \end{cases}$
(c) $\begin{cases} x = -3 \\ y = 3 \end{cases}$ or $\begin{cases} x = -1 \\ y = -3 \end{cases}$
2. (a) $\begin{cases} x = 4 \\ y = -13 \end{cases}$ or $\begin{cases} x = 2 \\ y = -9 \end{cases}$
(b) $\begin{cases} x = -2 \\ y = -3 \end{cases}$
3. (a) 2 distinct real solutions
(b) 2 distinct real solutions
4. 23
5. 60° , 180° or 300°
6. (a) $\frac{4}{5}$ or $\frac{8}{7}$
(b) $2^x = -1$ (rejected) or $x = 1$
(c) 25 or 36 (rejected)
7. 4.82 or $\frac{-1 - \sqrt{113}}{2}$ (rejected)
8. 3 hours

M.C.

1. B
2. C
3. C