

BE-Alg. 1 | WEDNESDAY 9-23-09

The
Real
ACT

2nd
Ed

1min
EACH

① If $4x + 3 = 9x - 4$, then $x = ?$

② Simplify: $a[b + (c - d)]$

③ If $12x = -8(10 - x)$, then $x = ?$

ANS

$$\begin{array}{r} \textcircled{1} \quad 4x + 3 = 9x - 4 \\ -4x \quad -4x \end{array}$$

$$\begin{array}{r} 3 = 5x - 4 \\ +4 \quad +4 \end{array}$$

$$\frac{7}{5} = \frac{5x}{5}$$

$$\frac{7}{5} = x$$

$$\boxed{x = \frac{7}{5}}$$

$$\textcircled{2} \quad a[b + (c - d)]$$

$$a[b + c - d]$$

$$\boxed{ab + ac - ad}$$

$$\textcircled{3} \quad 12x = -8(10 - x)$$

$$\begin{array}{r} 12x = -80 + 8x \\ -8x \quad -8x \end{array}$$

$$\frac{4x}{4} = \frac{-80}{4}$$

$$\boxed{x = -20}$$