ACT-like Math Questions   Topic: Solving Linear Equations

Easy:

1.) If $3x - 7 = 4x - 2$, then what is x?

    A. -5

    B. $-\frac{1}{5}$

    C. $\frac{9}{7}$

    D. $\frac{7}{9}$

    E. 5

2.) If $x = |9(-2) + 4|$, what is x?

    F. -14

    G. -9

    H. 9

    J. 14

    K. 22

3.) If $3x = -2(x + 1) + 6$, then x=?

    A. $\frac{4}{5}$

    B. $1\frac{2}{5}$

    C. $1\frac{3}{5}$

    D. 4

    E. 8

Medium:

4.) If $3a + 2 = -4$ and $5b - 1 = 9$, what is $a + b$?

    F. -2

    G. $-\frac{14}{15}$

    H. 0

    J. 2

    K. 4

5.) Solve the following equation for a:

$$\frac{a}{5} + \frac{4}{3} = \frac{2}{15}$$

    A. -6

    B. $\frac{-4}{3}$

    C. $\frac{4}{3}$

    D. 3

    E. 5

6.) If $|5x - 2| = 7$, which of the following could be a value of x?

    F. -5

    G. -1

    H $-\frac{9}{5}$

    J. $\frac{5}{9}$

    K. 1

Difficult:

7.) What value of k will cause the following equation to have no solution?

$$6x - 3 = k(2x - 5) + 4$$

    A. -3

    B. 0

    C. 1

    D. 2

    E. 3

Answers:

1.) A

2.) J

3.) A

4.) H

5.) A

6.) G

7.) E