**Entering Algebra 1, any level, you should have the following skills:**

1. Evaluate expressions containing variables
2. Solve one step equations by adding, subtracting, multiplying or dividing
3. Solve inequalities by using addition and subtraction properties of inequalities
4. Add and subtract integers
5. Add and subtract fractions with like and unlike denominators
6. Multiply fractions
7. Divide fractions
8. Covert fractions to decimals and decimals to fractions
9. Graph points in all quadrants on the coordinate plane
10. Solve verbal problems by translating them into equations and inequalities

## Sample Questions

<mark>Questions related to skill 1</mark>:

**Evaluate each using the values given.**

1) $(h)(k-j)$; use $h = 2$, $j = 1$, and $k = 4$

    6

2) $xy - x$; use $x = 6$, and $y = 3$

    12

<mark>Questions related to skill 2</mark>:

**Solve each equation.**

1) $10 + x = 26$

    $\{16\}$

2) $n - 9 = 3$

    $\{12\}$

3) $8x = 72$

    $\{9\}$

4) $10 = \dfrac{x}{4}$

    $\{40\}$

**Solve each inequality.**

1) $3 > \dfrac{x}{8}$

$x < 24$

2) $x - 10 \geq -15$

$x \geq -5$

3) $-11x > 176$

$x < -16$

4) $a + 5 \leq 19$

$a \leq 14$

**Evaluate each expression.**

1) $46 - 7 + 13 - 33$

19

2) $45 + 13 - 19 + 3$

42

**Find each sum.**

1) $\dfrac{12}{7} + \dfrac{1}{2}$    $\dfrac{31}{14}$

2) $\dfrac{2}{3} + \dfrac{5}{3}$    $\dfrac{7}{3}$

**Find each difference.**

1) $\dfrac{1}{2} - \dfrac{2}{7}$    $\dfrac{3}{14}$

2) $4\dfrac{3}{5} - 2\dfrac{3}{5}$

2

**Find each product.**

1) $\left(\dfrac{6}{7}\right)\left(\dfrac{9}{10}\right)$    $\dfrac{27}{35}$

**Find each quotient.**

1) $\dfrac{\dfrac{10}{7}}{\dfrac{3}{8}}$    $\dfrac{80}{21}$

2) $1\dfrac{1}{6} \div \dfrac{1}{4}$    $\dfrac{14}{3}$

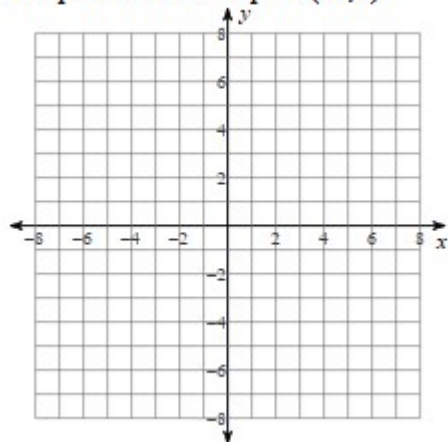1) Convert 0.8 to a fraction.

   4/5

2) Convert 7/8 to a decimal.

   0.875

1) Graph the ordered pair (-2,3)

1) the difference of x and 5 is 28

   $x - 5 = 28$

2) the sum of a and 7 is less than 28

   $a + 7 < 28$