### Algebra 1 Benchmark 1.1
**Topic: Real Number Operations**

1. \(-3(-6) = \)
2. \(-20 ÷ (-5) = \)
3. \(-10(3) = \)
4. \(-7 - (-5) = \)
5. \(-5 - 12 = \)
6. \(-2 + 7 = \)
7. \(24 ÷ (-8) = \)
8. \(-4 + (-8) = \)

### Algebra 1 Benchmark 1.2
**Topic: Order of Operations**

1. Evaluate: \(-12 ÷ 6 + 7 - 3(7) \)
2. Evaluate: \(-3 - 2(7 - 11)^2 \)

### Algebra 1 Benchmark 4.0
**Topic: Simplifying Expressions**

1. Simplify: \(\frac{20x - 4}{-4} \)
2. Simplify: \((-3h + 7k)(-2) \)
3. Simplify: \(2(-9 + 5x) - 2(x - 1) \)

### Algebra 1 Benchmark 5.1
**Topic: Solving Equations**

1. \(x - 3 = 8 \)
2. \(\frac{2}{3}x + 3 = 7 \)
3. \(-5(x - 1) = 6 \)
4. \(2(x - 5) = 2x - 7x - 7 \)
### Algebra 1 Benchmark 5.2  
**Topic: Solving Inequalities**

1. $3x - 5x > 30$
2. $3x - 4 \geq 14$
3. $7 - 4x > 2x + 10$
4. $2(x + 5) \leq -3 + x$

### Algebra 1 Benchmark 5.3  
**Topic: Evaluating Equations and Expressions**

1. Evaluate: $3y - 8x$
   when $x = -4$ and $y = 7$
2. Evaluate: $\frac{12 + 4x}{-3x}$
   when $x = -5$
3. Is $x = -3$ a solution for the following inequality? $2(x - 1) < -3 + 5x$

### Algebra 1 Benchmark 5.4  
**Topic: Solving Word Problems**

Write an equation to represent the following statement and then solve it:

*Ten less than three times a number is 30.*

### Algebra 1 Benchmark 3.0  
**Topic: Solving Absolute Value Equations**

1. Solve for $x$: $|2x - 5| = 9$
2. Solve for $x$: $|5 - 3x| > 12$
### Algebra 1 Benchmark 7.1

**Topic: Interpreting Linear Equations**

1. Does the point (-3, 8) lie on the line defined by: \( y = -3x - 5 \)?

2. Does the point (-3, -9) lie on the line defined by: \( 5x + 3y = 7 \)?

### Algebra 1 Benchmark 7.2

**Topic: Slope**

1. Find the slope of a line through (-8,1) and (7,-1)

2. Find the slope of the following line:

### Algebra 1 Benchmark 6.1

**Topic: Graphing Linear Equations**

1. Graph the linear equation on the coordinate plane:
   \[ y = \frac{2}{3}x - 1 \]

2. Graph the linear equation on the coordinate plane:
   \[ x - 2y = -6 \]

### Algebra 1 Benchmark 6.2

**Topic: Deriving & Interpreting Linear Equations**

1. What is the equation of the following graph?

2. What is the slope and y-intercept for the following equations?
   - \(-x + 3y = 9\)

3. What are the x and y-intercepts of the following linear equation?
   - \(3x - 4y = -24\)
1. What ordered pair is the solution to this system? (Use graphing)
\[ 2x + y = 2 \]
\[ y = -3x + 1 \]
\[ (__,__) \]

2. What ordered pair is the solution to this system? (Use substitution)
\[ y = -x + 6 \]
\[ 4x - y = 14 \]
\[ (__,__) \]

1. Graph the linear inequality on the coordinate plane:
\[ y < 3 \]

2. Graph the linear inequality on the coordinate plane:
\[ 2x - 3y < -6 \]
Answers

Benchmark 1.1
1. 18
2. 4
3. -30
4. -2
5. -17
6. 5
7. -3
8. -12

Benchmark 1.2
1. -16
2. -35

Benchmark 4.0
1. -5x + 1
2. 6h – 14k
3. 8x – 16

Benchmark 5.1
1. 11
2. 6
3. -1/5
4. 3/7

Benchmark 5.2
1. x < -15
2. x ≥ 6
3. x < -\frac{1}{2}
4. x ≤ -13

Benchmark 5.3
1. 3
2. 64
3. Yes
4. No

Benchmark 6.1
1. \frac{2}{3} y = x + 3
2. m = 5/3 & b = 6
3. x-int: (10,0) & y-int: (0,-2)

Benchmark 6.2

Benchmark 6.3

Benchmark 7.0
1. No
2. (-2,8),(-1,5),(0,2),(1,-1),(2,-4)

Benchmark 9.0
1. (13,44)
2. (14,8)
3. (1,-1)