1. Which number satisfies the equation $8 = 13 - x$?
   A) 5   B) -5
   C) 21   D) -21

2. Solve: $\frac{4}{9}y - 6 = 2$
   A) -9   B) $\frac{32}{9}$
   C) 18   D) $-\frac{16}{9}$

3. Solve: $x + 7 = 5(4x - 3)$
   A) $\frac{10}{19}$   B) $\frac{4}{19}$
   C) $-\frac{8}{19}$   D) $\frac{22}{19}$

4. Solve: $\frac{x + 8}{7} - \frac{x - 8}{9} = 2$
   A) -63   B) 55
   C) -7   D) -1

5. Solve: $\frac{4}{5} - \frac{x}{20} = \frac{2(x + 8)}{40}$
   A) 0   B) 8
   C) 4   D) 12
6. Solve: \(0.03P + 0.05(1700 - P) = 65\)
   A) -1000     B) -10
   C) 1000       D) 4217.5

7. Solve: \(\left| \frac{5}{2}x + 4 \right| + 4 = 9\)
   A) \(\frac{34}{5}, \frac{18}{5}\)  B) \(\frac{2}{5}, -\frac{18}{5}\)
   C) \(\frac{2}{5}, -\frac{34}{5}\)  D) \(\frac{5}{2}, -\frac{45}{2}\)

8. Solve: \(|x - 4| = |x - 8|\)
   A) 6, -2     B) 6
   C) 4, 8      D) -2

9. Graph: \(x \geq 1\)
   A) 
   B) 
   C) 
   D) 

10. Graph: \(3(x + 2) \leq 5x + 4\)
    A) 
    B) 
    C) 
    D)
11. Graph: $\frac{x}{8} - \frac{x}{3} < \frac{x - 8}{8}$

A) 

B) 

C) 

D) 

12. Graph: $\{x \mid x > -4 \text{ and } x < 1\}$

A) 

B) 

C) 

D) 

13. Graph: $\{x \mid x < -4 \text{ or } x \geq 3\}$

A) 

B) 

C) 

D)
14. Graph: \( x + 3 \leq 5 \) and \( -2x < 6 \)

A)  
-10 -5 0 5 10

B)  
-10 -5 0 5 10

C)  
-10 -5 0 5 10

D)  
-10 -5 0 5 10

15. Graph: \( -3 \leq -3x - 6 < 3 \)

A)  
-10 -5 0 5 10

B)  
-10 -5 0 5 10

C)  
-10 -5 0 5 10

D)  
-10 -5 0 5 10

16. Graph: \( |6x - 9| \leq 3 \)

A)  
-10 -5 0 5 10

B)  
-10 -5 0 5 10

C)  
-10 -5 0 5 10

D)  
-10 -5 0 5 10
17. Graph: $|2x + 1| > 6$

A) 
\[
\begin{array}{c}
-10 \\
-5 \\
0 \\
5 \\
10 \\
\end{array}
\]

B) 
\[
\begin{array}{c}
-10 \\
-5 \\
0 \\
5 \\
10 \\
\end{array}
\]

C) 
\[
\begin{array}{c}
-10 \\
-5 \\
0 \\
5 \\
10 \\
\end{array}
\]

D) 
\[
\begin{array}{c}
-10 \\
-5 \\
0 \\
5 \\
10 \\
\end{array}
\]

18. If $H = 2.85h + 73.43$, find $h$ when $H = 150.38$.

A) 74.1 
B) 2.7 
C) 219.3075 
D) 27

19. Solve for $A$ in $B = \frac{3}{7}(A - 11)$.

A) \(\frac{7B + 77}{3}\) 
B) \(\frac{7B + 74}{7}\) 
C) \(\frac{7B + 30}{7}\) 
D) \(\frac{7B + 33}{3}\)

20. The perimeter of a rectangle is $P = 2L + 2W$, where $L$ is the length and $W$ is the width. If the perimeter is 180 feet and the length is 10 feet more than the width, what are the dimensions?

A) 40 ft by 50 ft 
B) 40 ft by 20 ft 
C) 80 ft by 100 ft 
D) 30 ft by 40 ft

21. The sum of three consecutive odd integers is 75. What are the three integers?

A) 25, 27, 29 
B) 23, 25, 27 
C) 24, 25, 26 
D) 22, 24, 26
22. A woman's salary was increased by 30% to $29,900. What was her salary before the increase?
   A) $6900       B) $42,714
   C) $99,667     D) $23,000

23. Martin purchased some municipal bonds yielding 12% annually and some certificates of deposit yielding 13% annually. If Martin's total investment amounts to $23,000 and the annual income is $2910, how much money is invested in bonds and how much is invested in certificates of deposit?
   A) $9500 in bonds
       $13,500 in certificates of deposit
   B) $8500 in bonds
       $14,500 in certificates of deposit
   C) $15,000 in bonds
       $8000 in certificates of deposit
   D) $8000 in bonds
       $15,000 in certificates of deposit

24. A freight train leaves a station traveling at 30 mph. Two hours later, a passenger train leaves the same station in the same direction at 40 mph. How far from the station does the passenger train overtake the freight train?
   A) 6 mi       B) 240 mi
   C) 150 mi     D) 180 mi

25. How many gallons of a 70% salt solution must be mixed with 40 gallons of a 15% salt solution to obtain a solution that is 60% salt?
   A) 60 gallons   B) 6 gallons
   C) 18 gallons   D) 180 gallons