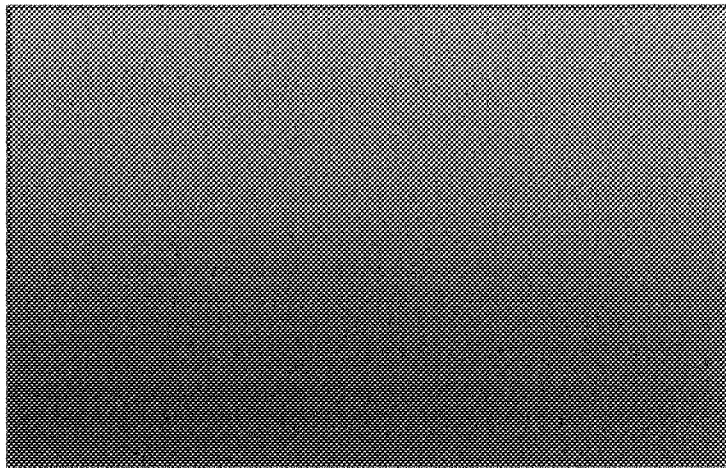


①
For what values of x would the rectangle have perimeter of at least 400?

Write an inequality in order to solve the problem.



$$4x + 3$$

$$x + 37$$

2

Solve the formula for the specified variable.

1) $M = C(1+r)$ for r

2) $C = \frac{5}{9}(F - 32)$ for F

③

Find $f(2)$, $f(0)$, $f(-3)$

$$f(x) = -3x + 5$$

4

John Johnson has grades of 84 and 98 on his first two history tests. What must he score on his third test so that his average is at least 90?

5

Solve the inequality. Then graph the solution.

$$2x - (4x + 3) < 6x + 3(x + 4)$$



6

Solve the formula for the specified variable.

1) $V = \frac{1}{3}\pi r^2 h$ for h

2) $A = p + prt$ for r

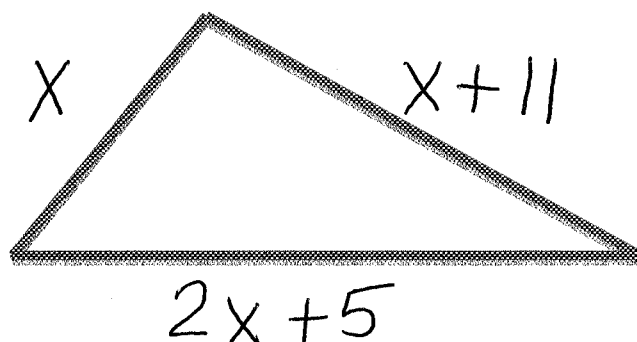
7

When 8 is subtracted from the sum of three times a number and 6, the result is less than 4 more than the number. Find all such numbers.

8

For what values of x would the triangle have perimeter of at least 72?

Write an inequality to solve the problem.



9

Solve the inequality.

$$2(3z - 5) + 4(z + 6) \geq 2(3z + 2) + 3z - 15$$

10

When 2 is added to the difference between six times a number and 5, the result is greater than 13 added to 5 times the number. Find all such numbers.

11

Solve the inequality. Then graph the solution.

$$\frac{2}{3}(p + 3) > \frac{5}{6}(p - 4)$$



12

Determine whether each relation is a function. Give the domain and range.

1) $\{(-4, 3), (-2, 1), (0, 5), (-2, -8)\}$

2) $\{(3, 7), (4, 7), (3, 8), (4, 8)\}$

13

The formula for converting Fahrenheit temperature to Celsius is

$$C = \frac{5}{9}(F - 32)$$

If the Celsius temperature on a certain day in San Diego, California is never more than 25° , how would you describe the corresponding Fahrenheit temperature?

14

Solve the inequality. Then graph the solution.

$$-x + 4 + 7x \leq -2 + 3x + 6$$



15

At the Speedy Gas 'n Go, a car wash costs \$3.00, and gasoline is selling for \$1.50 per gallon. Terri Toenail has \$17.25 to spend, and her car is so dirty that she must have it washed. What is the maximum number of gallons that she can purchase?

Write an inequality in order to solve the problem.

16

Energizer Eveready has scores of 74 and 82 on her first two battery tests. What must the battery score be on her third test so that her average is at least 80?