

1. $9x + 5 = 5 - 9x$

2. $\frac{3}{7}x - 4 = \frac{1}{7}x + 2$

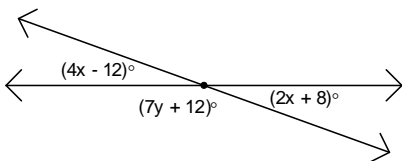
3. $4(-2x + 3) = 12 - 8x$

4. $6x - (4 + 2x) = 2(2x + 2)$

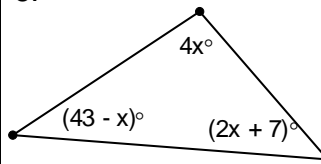
5. $3x + 6 - x - 8 = 4x + 12$

6. $\frac{1}{4}(4 - x) = 2(5 + x)$

7.



8.



For each of the following make sure that you set up an algebraic equation to solve.

9. The sum of four consecutive even integers is 308. What are the four integers?

10. The sum of three consecutive odd integers is -87. What are the integers?

11. Three friends were born in consecutive years. The sum of their birth years is 5961. Find the year in which each of them was born.

12. The sum of three numbers is 46. The second number is 6 less than twice the first. The third number is 4 more than three times the first. Find the three numbers.

13. The width of a rectangle is 17 cm more than the length. The perimeter of the rectangle is 76 centimeters. What are the dimensions of the rectangle?

Draw a picture:

14. A board 40 inches long is to be cut into two pieces so that the longer piece is 5 inches less than four times the shorter piece. Find the length of each piece.

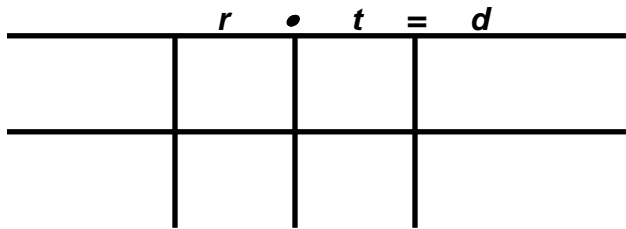
15. Each of two congruent sides of an isosceles triangle is 8 inches less than twice the base. The perimeter of the triangle is 74 inches. What is the length of each side?

Draw a picture:

Write the equation based on the picture:

16. Two cars leave Darien at the same time, one traveling north, the other south. The first car travels at 50 miles per hour and the second at 60 miles per hour. In how many hours will the cars be 275 miles apart?

Step 1:



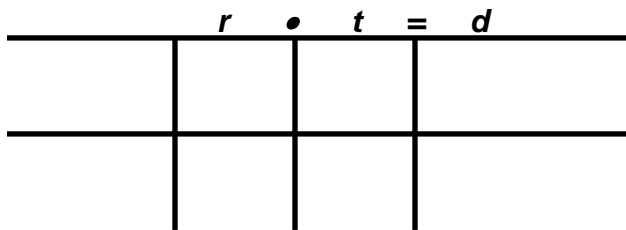
Step 2: Write the equation

Step 3: Solve the Equation

Step 4: Answer

17. Stacey and Sam start from the same place at the same time and walk in opposite directions on Clarendon Hills Road. Sam walks twice as fast as Stacey. After a half hour they are 120 meters apart. How fast does each girl walk?

Step 1:



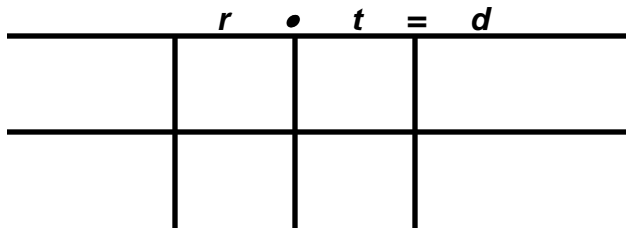
Step 2: Write the equation

Step 3: Solve the Equation

Step 4: Answer

18. Tom and Jerry start from the same point at the same time and go in opposite directions. Jerry travels 17 miles per hour and Tom travels 15 miles per hour. How long will it be before they are 48 miles apart?

Step 1:



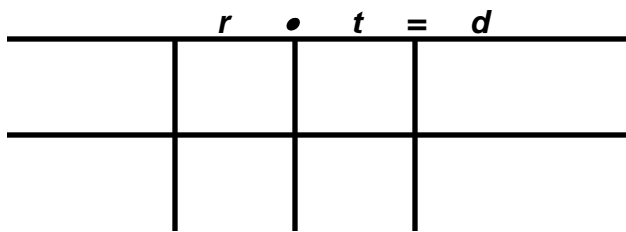
Step 2: Write the equation

Step 3: Solve the Equation

Step 4: Answer

19. One jet leaves at noon and travels at 400 miles per hour. Another jet leaves at 2 p.m. and travels at 600 miles per hour. The jets start from the same point and travel in the same direction. What time will it be when the faster jet overtakes the slower one?

Step 1:



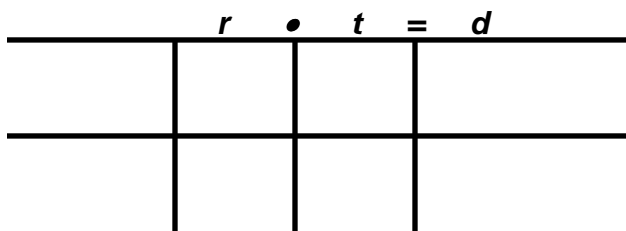
Step 2: Write the equation

Step 3: Solve the Equation

Step 4: Answer

20. Kristina leaves her house at noon, traveling in her car at 45 miles per hour. Later her brother John leaves their house and travels in the same direction at 60 miles per hour. If John leaves at 2 pm, at what time will he catch up with Kristina?

Step 1:



Step 2: Write the equation

Step 3: Solve the Equation

Step 4: Answer

Algebra 1
Chapter 2
Word Problem
Practice Answers

1.	$x = 0$
2.	$x = 21$
3.	x is any real #
4.	no solution
5.	$x = -7$
6.	$x = -4$
7.	$x = 10$; $y = 20$
8.	$x = 26$
9.	74, 76, 78, 80
10.	-31, -29, -27
11.	1986, 1987, 1988
12.	8, 10, 28

13.	$10 \frac{1}{2}$ cm; $27 \frac{1}{2}$ cm
14.	9 in. & 31 in.
15.	base = 18 inches sides = 28 inches
16.	$2 \frac{1}{2}$ hours
17.	Stacey = 80m/h Sam = 160m/h
18.	$1 \frac{1}{2}$ hours
19.	6:00pm
20.	8:00pm