

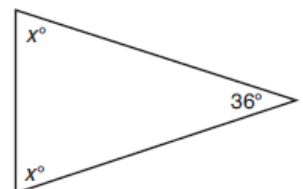
**8-3 Skills Practice: Writing Two-Step Equations****1. Translate each sentence into an equation.**

- a. Three more than eight times a number is equal to 19. \_\_\_\_\_
- b. Twelve less than seven times a number is 16. \_\_\_\_\_
- c. Four more than twice a number is  $-10$ . \_\_\_\_\_
- d. Nine less than five times a number is equal to  $-30$ . \_\_\_\_\_
- e. Nine more than the quotient of a number and 4 is 12. \_\_\_\_\_
- f. Four less than the quotient of a number and 3 is  $-10$ . \_\_\_\_\_
- g. Nine less than six times a number is  $-15$ . \_\_\_\_\_
- h. Three less than the quotient of a number and 6 is 1. \_\_\_\_\_
- i. Eight more than the quotient of a number and 5 is 3. \_\_\_\_\_
- j. The difference between twice a number and 11 is  $-23$ . \_\_\_\_\_

**2. Write and solve an equation for each of the following: (show your work!)**

- a. Ishi bought a canvas and 8 tubes of paint for \$24.95. If the canvas cost \$6.95, how much did each tube of paint cost?
- b. The world's two highest dams are both in Tajikistan. The Rogun dam is 35 meters taller than the Nurek dam. Together they are 635 meters tall. Find the height of the Nurek dam.

- c. Find the value of  $x$  in the triangle at the right.



- d. If you double President Reagan's age at the time of his first inauguration and subtract his age at the time he died, the result is 45 years. How old was President Reagan when he died?

| President     | Age at First Inauguration |
|---------------|---------------------------|
| J. Carter     | 52                        |
| R. Reagan     | 69                        |
| G. H. W. Bush |                           |
| W. Clinton    | 46                        |
| G. W. Bush    | 54                        |

- e. If you divide the age of the first President Bush when he was inaugurated by 2 and add 14 years, you get the age of President Clinton when he was first inaugurated. How old was President G. H.W. Bush when he was inaugurated?

- f. Three consecutive integers can be represented by  $n$ ,  $n + 1$ , and  $n + 2$ . If the sum of three consecutive integers is 57, what are the integers?

- g. Ella swims four times a week at her club's pool. She swims the same number of laps on Monday, Wednesday, and Friday, and 15 laps on Saturday. She swims a total of 51 laps each week. How many laps does she swim on Monday?

- h. Over the weekend, Koko spent 2 hours on an assignment, and she spent equal amounts of time studying for 4 exams for a total of 16 hours. How much time did she spend studying for each exam?

- i. At the market, Meyer buys a bunch of bananas for \$0.35 per pound and a frozen pizza for \$4.99. The total for his purchase was \$6.04, without tax. How many pounds of bananas did Meyer buy?