



4. Use separate notebook paper to show all work and check answers.

Solve for the indicated variable:

a)  $\frac{3}{5}y = -9$

b)  $\frac{2d+3}{8} = -2$

c)  $\frac{x}{2} + \frac{x}{3} = 25$

d)  $\frac{1}{2}x + \frac{1}{3}x = 25$

e)  $\frac{a}{-6} + 5 = 2$

f)  $2x - 5(x - 3) = 2(x - 10)$

5. Write a generic formula for the height ( $h$ ) of a rectangular prism, in terms of the volume, length and width. Use your formula to determine the height of a box whose volume is  $756 \text{ in}^3$  and whose length and width are 9 and 12 inches respectively.

6. Amy and Jean Marie leave Morristown driving in opposite directions. Amy's average speed is 5 miles per hour faster than Jean Marie's average speed. In four hours they are 476 miles apart. What is each driver's average speed?

7. Four consecutive odd numbers have a sum of 56. What is the product of the first and third numbers?
8. Four less than 5 times a number is 12. Find the number.
9. One half of a number decreased by two-thirds is 2 less than one-fifth of the number. Write an equation and solve to find the number.