

5. Chatty Cathy can't seem to keep her mouth shut, so her teacher finally decided to do something about it. She told Cathy that for every time she talks out of turn, 2 points will be taken off her score. Today, Cathy started with a great score of 96 on her spelling test! How many times did Cathy get in trouble for being chatty if she left the class with a score of 84?

$$96 - 2x = 84$$

$$\begin{array}{r} -96 \quad -96 \\ \hline \end{array} \quad \text{Sub} =$$

$$\begin{array}{r} -2x = -12 \\ \hline \end{array} \quad \text{Div} =$$

$$x = 6$$

times

6. Ms. Risius and her students went scuba diving in Costa Rica and found a treasure chest filled with 14 beautiful necklaces. After taking it all to get appraised, they found out that their treasure was worth over \$103,000. The chest itself was worth 19,000. Assuming each necklace has the same value, how much was each necklace worth?

$$14x + 19000 > 103000$$

$$\begin{array}{r} -19000 \quad -19000 \\ \hline \end{array} \quad \text{Sub} =$$

$$\begin{array}{r} 14x > 84000 \\ \hline \end{array} \quad \text{Div} =$$

$$x > 6000$$

7. Twice the sum of three times a number and seven is equal to forty-four. What is the number?

$$2(3x + 7) = 44$$

$$6x + 14 = 44 \quad \text{Dist} =$$

$$\begin{array}{r} -14 \quad -14 \\ \hline \end{array} \quad \text{Sub} =$$

$$\begin{array}{r} 6x = 30 \\ \hline \end{array} \quad \text{Div} =$$

$$x = 5$$

8. Ben put in 250 miles of running over the summer. His goal is to run at least 1000 miles for the year. With 42 weeks left in the year, how many miles must he average per week in order to reach his goal?

$$250 + 42w \geq 1000$$

$$\begin{array}{r} -250 \quad -250 \\ \hline \end{array}$$

$$\begin{array}{r} 42w \geq 750 \\ \hline \end{array} \quad \text{Div} =$$

$$w \geq 17.8$$

$$w \geq 18$$

miles