

8. When $x = \frac{1}{2}$, what is the value of $\frac{8x-3}{x}$

$$\frac{8(\frac{1}{2}) - 3}{(\frac{1}{2})}$$

$$\frac{4 - 3}{\frac{1}{2}}$$

$$1 \div \frac{1}{2}$$

$$1 \cdot \frac{2}{1} = 2$$

9. Find the midpoint.

Midpoint formula $\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}$

$(3, 8)$ and $(1, -4)$

$$\frac{3+1}{2}, \frac{8+(-4)}{2}$$

$$\frac{4}{2}, \frac{4}{2}$$

$$(2, 2)$$

12. Total fine for speeding \$221.

\$17 for every mile over speed limit

$$\frac{221}{17} = 13 \text{ miles over speed limit.}$$

$$\begin{array}{ccc} 30 & + & 13 \\ \text{speed} & & \text{miles} \\ \text{limit} & & \text{over} \end{array} = 43 \text{ miles.}$$

Kirk was traveling at 43 mph

13. Sum of solutions of 2 equations

$$8x = 12$$

$$2y + 10 = 22$$

$$\frac{8x}{8} = \frac{12}{8}$$

$$x = 1\frac{1}{2}$$

$$\begin{array}{r} 2y + 10 = 22 \\ -10 \quad -10 \\ \hline \end{array}$$

$$\frac{2y}{2} = \frac{12}{2}$$

$$y = 6$$

$$1\frac{1}{2} + 6 = 7\frac{1}{2}$$

14. $\text{Average} = \frac{\text{Total sum of all numbers}}{\text{Number of items}}$

$$\frac{420}{5} = 84$$

Median is the same as the average

$$\text{Median} = 84$$

We can find the sum of 4 scores by subtracting

$$420 - 84 = 336$$

15 $|| -8 + 4 | - | 3 - 9 | |$

$$|-4| - |-6|$$

$$|4 - 6|$$

$$|-2|$$

$$= 2$$

16 Write the equivalent

$$x^{\frac{3}{2}} \cdot \sqrt[3]{x^2}$$