

Deal or No Deal

- * Each team needs a team name
- * Highest scoring team wins

Simplify:

$$\frac{3}{4}(2x - 5y) + \frac{1}{2}\left(\frac{2}{3}x + 4y\right)$$

$$22x - 21y$$

Solve, graph, describe:

$$1 + 2x < 2(x - 1)$$

No Solution

Define a variable, write an equation/inequality, and solve. The length of a rectangle is 5 cm more than twice its width. Find the length and width if the perimeter is 82 cm.

Length- 29 cm
Width- 12 cm

Solve, graph, describe:

$$\left| 1 - \frac{x}{3} \right| \geq \frac{2}{3}$$

$$x \leq 1 \text{ or } x \geq 5$$

Evaluate: $\frac{2a^3 + 2bc}{c^2 - 5}$ if $a=2$, $b=-4$, and $c=3$

-2

Solve, graph, describe:

$$7x - 1 > x + 11 \text{ or } -11x > -33$$

All real numbers

Define a variable, write an equation/inequality, and solve. A woman drove part of a 185 mile trip at 50 mi/h and the rest at 55 mi/h. Find the distance she traveled at 50 mi/h if her total driving time was 3 h and 30 minutes.

75 miles

Solve the equation used to find the area of a trapezoid for h .

$$A = \frac{1}{2}h(x+y)$$

$$h = \frac{2A}{x+y}$$

Define a variable, write an equation/inequality, and solve. The base angle of an isosceles triangle each measure fifteen degrees less than half the measure of the vertex angle. Find the measures of the angles of the triangle.

37.5°, 37.5°, 105°

Solve, graph, describe:

$$0 < 1 - x \leq 3 \text{ or } -1 \leq 2x - 3 \leq 5$$

$$-2 \leq x \leq 4$$

Define a variable, write an equation/inequality, and solve. Find all sets of three consecutive odd integers whose sum is between 36 and 50.

{ 11, 13, 15 }
{ 13, 15, 17 }

Solve: $|3x - 2| = 8$

$\{-2, 10/3\}$

Solve and graph.

$$\left| \frac{x}{2} + 3 \right| - 1 \geq 3$$

$$x \leq -14 \text{ or } x \geq 2$$

Define a variable, write an equation/inequality, and solve. A grocer wants to mix peanuts and cashews to produce 36 lbs of mixed nuts worth \$6.20/lb. How many pounds of each kind of nut should she use if peanuts cost \$4.80/lb and cashews cost \$8/lb?

Peanuts: 20.25 lb
Cashews: 15.75 lb

Solve and graph. $\frac{3t - 8}{5} < -1$ and $4 - t < -7$

$$-11 < t < 1$$

Solve and graph.

$$\frac{1}{3}(x-5) \leq -4 \text{ or } 7x+7 > 13+9x$$

$$x < -3$$



Define a variable, write an equation/inequality, and solve. A purse contains \$2.05 in nickels, dimes, and quarters. There are twice as many nickels as dimes and three fewer quarters than nickels. Determine the number of each coin.

Nickels: 8
Dimes: 4
Quarters: 5



Solve and graph.

$$\frac{2}{3}|g-2| > -8$$

All Reals



Name all the sets the following belong to:

A) 6 B) $\frac{1}{2}$ C) -1.2356... D) -6

A) RQZWN B) RQ C) RI D) RQZ



Evaluate:

$$\frac{1}{10} [2(3+4) - 3^2]$$

1/2

Solve the inequality $2\left|\frac{2x}{3} + 1\right| \geq 4$

$$x \leq -\frac{9}{2} \text{ or } x \geq \frac{3}{2}$$

Solve for y: $6xy + 2a + 5yz = c$

$$y = \frac{c - 2a}{6x + 5z}$$

Define a variable, write an equation/inequality, and solve. A bus is to be chartered for the senior class trip. The basic fare is \$9.50 per passenger. If more than 20 people go, everyone's fare is reduced by \$0.30 for each passenger over this number(20). At least how many people must go to make the fare less than \$7.50 per passenger?

At least 27 people must go.

