

$$\$100.00 - \$250.00$$

10% off

$$28 \text{ a.) } \$90.00 - \$225.00$$

$$6.5\% = 0.065$$

$$\text{b.) } \$95.85 - \$239.63$$

30.) $n = \text{a number}$

$$-8 < 3n + 4 < 10 \quad \text{is between does not include } < >$$

$$\begin{array}{r} -8 < 3n + 4 \\ -4 \quad -4 \\ \hline \end{array}$$

$$\frac{-12}{3} < \frac{3n}{3}$$

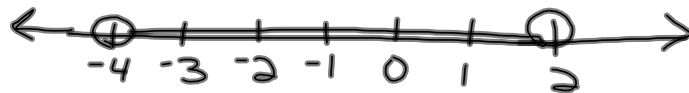
$$\begin{array}{r} -4 < n \\ \boxed{n > -4} \end{array}$$

$$\begin{array}{r} 3n + 4 < 10 \\ -4 \quad -4 \\ \hline \end{array}$$

$$\frac{3n}{3} < \frac{6}{3}$$

$$\boxed{n < 2}$$

$$\boxed{-4 < n < 2}$$



32.) $n = \text{a number}$

$$1 \geq \frac{1}{2}n > 0$$

$$0 < \frac{1}{2}n \leq 1$$

$$2. 0 < \frac{1}{2}n \cdot 2 \quad \frac{1}{2}n \leq 1 \cdot 2$$

$$0 < n \quad n \leq 2$$

$$\boxed{0 < n \leq 2}$$

38. absolute error
 $\frac{1}{2}$ unit of measure

relative error
 $\frac{\text{absolute error}}{\text{expected outcome}}$

1.85 cm $\frac{1}{100} \frac{1}{2} = \frac{1}{1000}$

61.2 cm 0.005

0.05

237

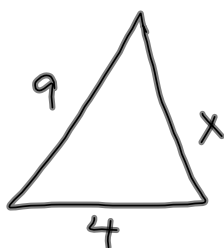
0.5

0.0021

0.003 0.3%

0.00082 0.08%

36.



$$\begin{aligned}
 a) \quad x + 9 &> 4 \\
 x + 4 &> 9 \\
 9 + 4 &> x
 \end{aligned}$$

$$\begin{aligned}
 x + 9 &< 4 \\
 x &< -5 \\
 x + 4 &< 9 \\
 x &< 5
 \end{aligned}$$

$$\begin{aligned}
 9 + 4 &> x \\
 13 &> x
 \end{aligned}$$

$$\boxed{5 < x < 13}$$

e.)

5b.)

	<u>%</u>	<u>Qts</u>	
lemon-lime	25%	3	$0.25(3)$
fruit juice	45%	n	$0.45(n)$
punch	30%	$3+n$	$0.3(3+n)$

$$0.45n = 0.3(3+n)$$

$$0.45n = 0.9 + 0.3n$$

5-5 Inequalities - Absolute Value

case 1

$| \quad | = +$
is not negative

$$|m+2| < 11$$

$$m+2 < 11$$

$$\quad \quad \quad \begin{matrix} -2 & -2 \end{matrix}$$

$$m < 9$$

case 2

$| \quad | = -$
is negative

$$-(m+2) < 11$$

$$-m - 2 < 11$$

$$\quad \quad \quad \begin{matrix} +2 & +2 \end{matrix}$$

$$\therefore -m < 13$$

$$m > -13$$

$$|y-1| < -2$$

\emptyset

42.) $(\overset{x}{-4}, \overset{y}{2})$ all $f(x)$ are 2

$$f(x) \geq \boxed{x} - 1 \quad 2 \geq -5$$

$$f(x) \geq -4 - 1$$

$$f(x) \geq -5$$

$$\boxed{f(x) = y}$$

Substitute the \boxed{x} coordinate
Solve for the x value

$$f(x) \geq x - 1 \quad f(x) \leq x - 1$$

$$2 \geq -4 - 1 \quad 2 \leq -5$$

$$2 \geq -5 \quad \text{true}$$

$$2 \leq -5 \quad \text{false}$$

