

Section 1.1

#14 $|5y+2|=12$

$$5y+2=12 \quad \text{or} \quad 5y+2=-12$$

$$5y=10 \quad \text{or} \quad 5y=-14$$

$$y=2 \quad \text{or} \quad y=\frac{-14}{5}$$

#33 $|x-8| \leq 0.001$

$$x-8 \leq 0.001 \quad \text{and} \quad x-8 \geq -0.001$$

$$x \leq 8.001 \quad \text{and} \quad x \geq 7.999$$

$$7.999 \leq x \leq 8.001$$

Section 1.2

#12 Use $y=mx+b$.

$$\text{Slope} = \frac{9-1}{5-2} = \frac{8}{3}$$

Use $(4,5)$ to find b :

$$5 = \frac{8}{3}(4) + b$$

$$5 = \frac{32}{3} + b$$

$$b = 5 - \frac{32}{3}$$

$$b = -\frac{17}{3}$$

$$\text{So the line is } y = \frac{8}{3}x - \frac{17}{3}$$

#20 $5x+3y-15=0$

$$3y = -5x+15$$

$$y = -\frac{5}{3}x+5$$

so slope is $-\frac{5}{3}$
and y intercept is $(0,5)$.

$$x\text{-intercept: } 5x+3(0)-15=0$$

$$5x-15=0$$

$$5x=15$$

$$x=3$$

So x -intercept
is $(3,0)$.