

SHOW YOUR WORK in a **CLEAR** and **ORGANIZED** manner and write **LEGIBLY** too. *If I can't understand the flow of your work, then that's not clear and if I can't understand your handwriting, then that's not legible. **NO WORK, NO CREDIT.*** **BOX** the final answers and then copy them in the answer column.

ANSWERS

Solve.

1) $\frac{2x-2}{3} = \frac{5-2x}{4}$ 2) $5(3x-2) = 10x+15$ 3) $2(3x+4) = 3(2x+3)-1$




4) $2(x-4)+5x = 2(6x+3)-5x$ 5) $7h+6-2\left(5+\frac{3}{2}h\right) = 5h-11$

6) $3h+2(3h+4) = 3(3h+2)+2$ 7) $\frac{3}{4}(8x-4) = \frac{2}{3}(6x+3)-5x$

Solve then graph the solution set on a number line.

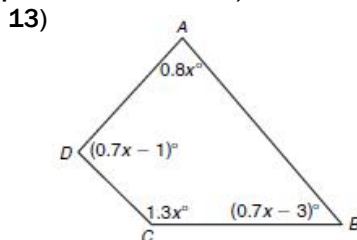
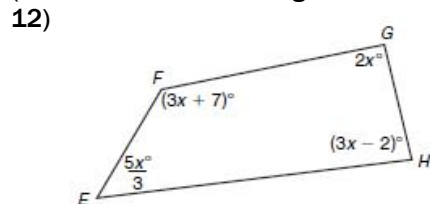
8) $\frac{3}{4}x \leq \frac{2}{3}x + \frac{5}{2}$ 9) $5-2h < 11$ 10) $-2+7x > 3(2x+1)$

11) Matt's cell phone plan gives him a maximum of 200 minutes each month.
a) Suppose his calls average 7 minutes. What is the maximum number of calls he can make each month?

1)
2)
3)
4)
5)
6)
7)
8) 
9) 
10) 

b) Matt knows that he has used 61 minutes during the first week of this month. If he limits his calls to 15 minutes per week for the remaining 3 weeks this month, what is the maximum length of time rounded to the nearest minute that he can use for each call?

Find the measure of each angle in the quadrilaterals below to the nearest tenth of a degree. (HINT: The sum of the angle measure in a quadrilateral is 360°.)



Determine if the rate of change, $\frac{\text{change in } f(x)}{\text{change in } x}$ is constant. Then tell whether each data set could represent a linear function or not.

14)

x	1	4	7	10
f(x)	5	1	-3	-7

15)

x	0	3	6	9
f(x)	1	3	7	10

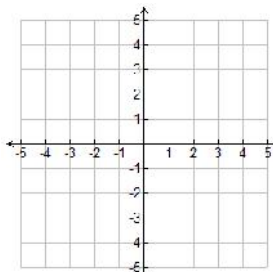
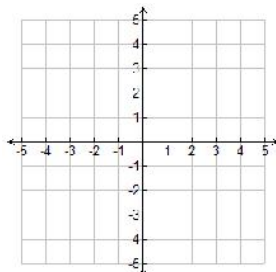
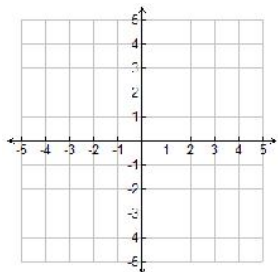
11a)
11b)
12)
13)
14) Rate of change:
YES NO
15) Rate of change:
YES NO

16) Write each equation in slope-intercept form. Determine the *slope* and the *y-intercept* then graph the line.

a) $3x - 2y = 12$

b) $2(y + 4) = 3(x + 3) + 1$

c) $\frac{x}{2} - \frac{y}{3} = 1$



17) Find the *x*- and *y*-intercepts for each line.

a) $4x + 3y = 24$

b) $\frac{2}{3}x + \frac{3}{4}y = 2$

c) $5x - 2(3y + 5) = 2(x - 3)$

Determine (a) the slope, and (b) the equation of the line, in slope-intercept form, that passes through the given points.

18) (3, 4), (5, 10)

19) (-3, 5), (-7, 13)

20) (4, -2), (-10, 8)

21) Write the equation of the line, in slope-intercept form, that passes through the point (-3, -6) and is

(a) parallel,

(b) perpendicular to the graph of the line $4x - 7y + 3 = 0$

Write the equation of the line in slope-intercept form.

22) line with slope $-\frac{2}{3}$ and y-intercept -4.

23) line with slope $\frac{3}{4}$ passing through (8, -4).

24) line parallel to $3x - 4y = 7$ passing through (5, -2).

25) line perpendicular to $5x + 3y = 12$ passing through (-6, 7).

16a) $m =$

$b =$

16b) $m =$

$b =$

16c) $m =$

$b =$

17a) *x*-int:

y-int:

17b) *x*-int:

y-int:

17c) *x*-int:

y-int:

18) $m =$

Equation:

19) $m =$

Equation:

20) $m =$

Equation:

21a)

21b)

22)

23)

24)

25)

