Quiz on Linear Concepts. Name_____

1. When writing **slope intercept form** equations, what form **must** the **slope** be written in?

1._____

2. When writing **slope intercept form** equations, what form is the intercept **not allowed** to be written in?

2._____

3. Name one of the two formulas for the **slope intercept form** of a line.

3._____

4. What are the **three criteria** for writing **standard form** equations?

4a._____

4b._____

4c._____

5. **Describe** the slope of the line with $m = \frac{-1}{2}$.

5._____

6. **Describe** the slope of the line with $m = \frac{5}{3}$.

6._____

7. How is a **y–intercept found**?

8. How is an **x–intercept found**?

9. What is the formula for **point slope linear equations**?

9._____

10. Write the **point slope linear** equation if $m = -\frac{3}{4}$ and it goes through (–2, 7).

10._____

11. What is the **slope** of $y = \frac{3}{5}x + 7$?

11._____

12. What is the **y–intercept** of $y = \frac{-4}{7}x + 9$?

12._____

13. What is the **slope** of $2x + 9y = 11$?
hint: you will want to first convert the equation into slope intercept form.

13._____

14. What is the **y–intercept** of $3x - 5y = 15$?
hint: you will want to first convert the equation into slope intercept form.

14._____

15. Create the t chart for. $y = \frac{2}{3}x - 5$

x	y

16. Create the t chart for. $5x + 3y = 12$

x	y

Write the equation in both standard and slope intercept form.

17. $(5,-2)$
$(10,1)$

Standard_____

Slope Int_____

18. $(-4,1)$
$(0,4)$

Standard_____

Slope Int_____

19. $(6,-8)$
$m = \frac{-2}{3}$

Standard_____

Slope Int_____

20. $(10,7)$
$m = \frac{4}{5}$

Standard_____

Slope Int_____

Write each equation in standard form

21. $y = \frac{2}{3}x - 5$

Standard_____

22. $y = \frac{-3}{5}x + \frac{2}{5}$

Standard_____

Write each equation in slope intercept form

23. $5x + 3y = 9$ Slope Int_____

24. $7x + 3y = 11$ Slope Int_____

Write the slope, y intercept as an ordered pair, and x intercept as an ordered pair

25. $3x - 4y = 24$ m = _____ y - int = _____ x - int = _____

26. $x - 4y = 16$ m = _____ y - int = _____ x - int = _____

27. $y = \frac{2}{5}x - 3$ m = _____ y - int = _____ x - int = _____

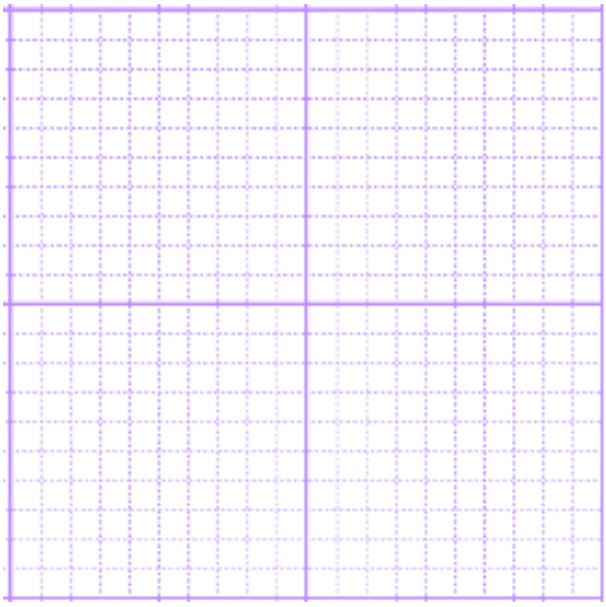
28. $y = \frac{3}{7}x - \frac{5}{7}$ m = _____ y - int = _____ x - int = _____

Graph Each of the following

29. $y = \frac{3}{5}x - 2$ m = _____ $\frac{steep\_or\_shallow}{incline\_or\_decline}$ _____

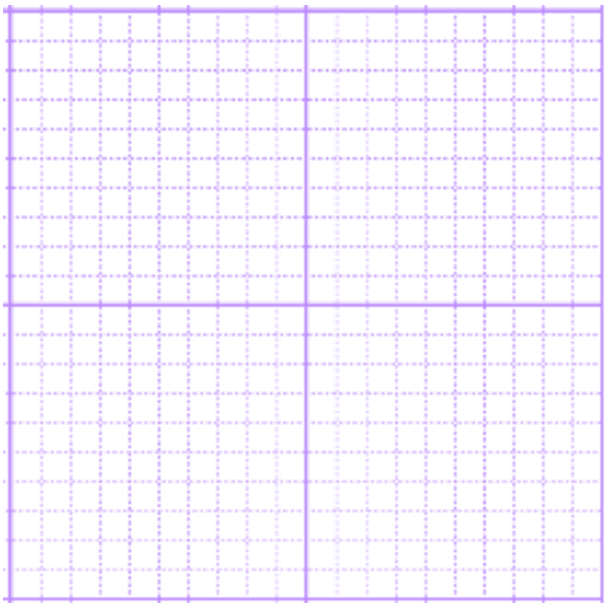
y - int = _____ Δx = _____

x	y



30. $y = \frac{-1}{3}x + 7$ m = _____ $\frac{steep\_or\_shallow}{incline\_or\_decline}$ _____

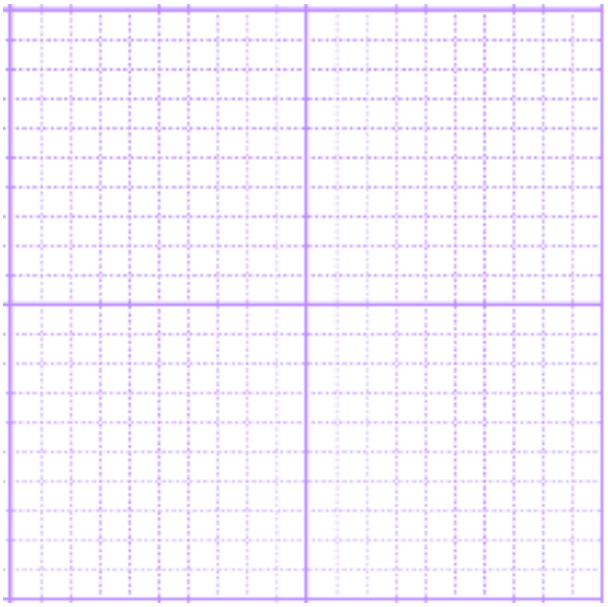
y - int = _____ Δx = _____



x	y

31. $3x - 2y = 6$ m = _____ $\frac{steep\_or\_shallow}{incline\_or\_decline}$ _____

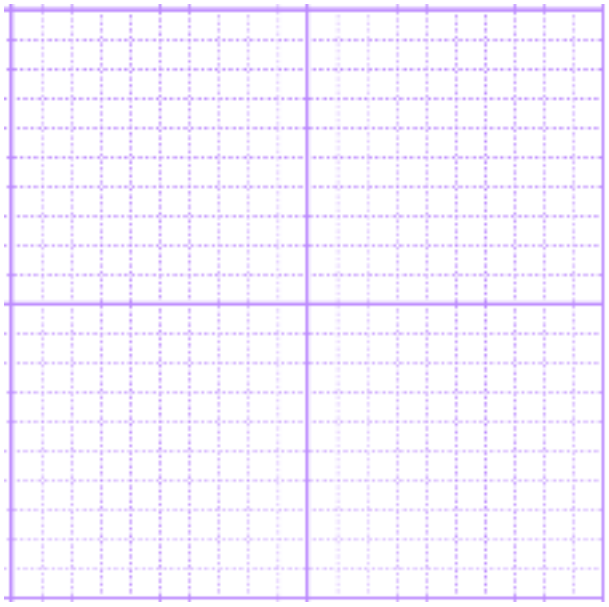
y - int = _____ Δx = _____



x	y

32. $5x + y = 3$ m = _____ $\frac{steep\_or\_shallow}{incline\_or\_decline}$ _____

y - int = _____ Δx = _____



x	y

27. Write an equation from the table.

X	Y
-18	-14
-9	-9
0	-4
9	1
18	6

28. Write an equation from the table.

X	Y
-8	12
-5	8
-2	4
1	0
4	-4