Algebra Readiness | Points and Slope | Full Name _____

05 B – Worksheet 4 | Date _____ Period _____

Label (x_1, y_1) *and* (x_2, y_2).

Then find the slope between the two points by using the slope formula. $m = \frac{Rise}{Run} = \frac{y_2 - y_1}{x_2 - x_1}$

1. $(3,4),\ (5,7)$

$x_1\ y_1 \quad x_2\ y_2$

$m = \frac{7-4}{5-3} = \frac{3}{2}$

2. $(5,-7),\ (-3,9)$

3. $(0,8),\ (0,3)$

4. $(3,4),\ (8,4)$

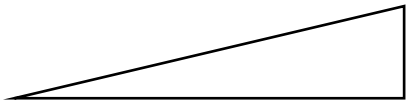
5. $(-1,4),\ (-5,7)$

6. $(-3,-1),\ (0,-2)$

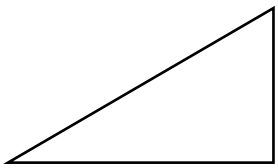
ADA Ramp Specifications Require a maximum of *1:12* ramp slope ratio. $|m| \le \frac{1}{12}$

Measure the sides of the following ramps to the nearest millimeter (mm). Find the slope of the ramp as a ratio. Then, determine whether the following ramps are ADA compliant.

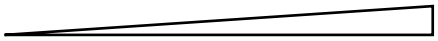
7.



8.

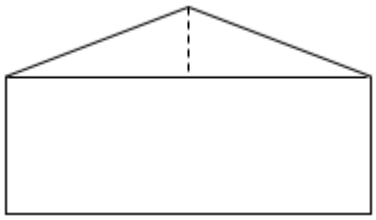


9.

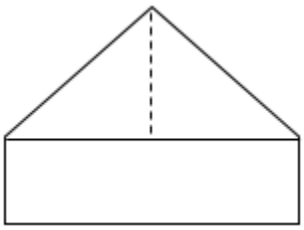


All new buildings and substantial roof modifications in the Tahoe are shall incorporate pitched roofs with a slope of no less than 5:12. $|m| \ge \frac{5}{12}$ Determine whether the following roofs are compliant with building code. Show your work.

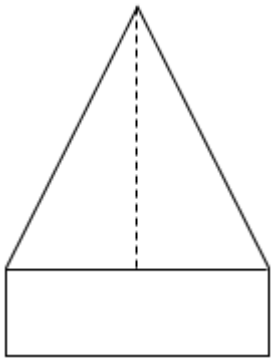
10.



11.



12.



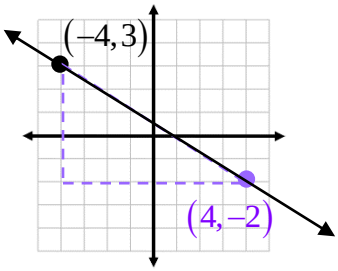
Standards: 6.NS.C.5 7.NS.A.1.c 6.NS.C.6.a 7.NS.A.1.a

Updated December 31, 2020

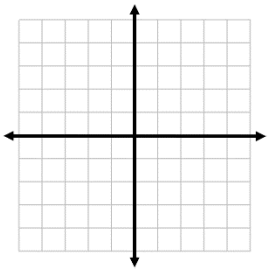
Review.

Plot and label the point on the graph.
Use the given slope to plot and label a second point on the graph.
Use a straight edge to connect the points with a line.

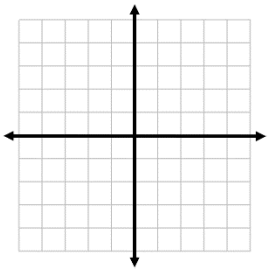
1. $(-4,3),\ m=-\frac{5}{8}$



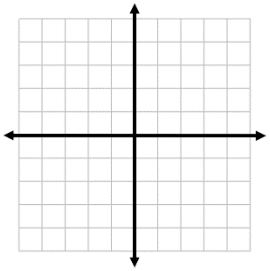
2. $(1,0),\ m=-\frac{1}{3}$



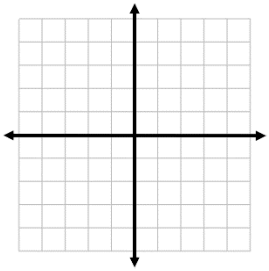
3. $(-4,2),\ m=-\frac{4}{3}$



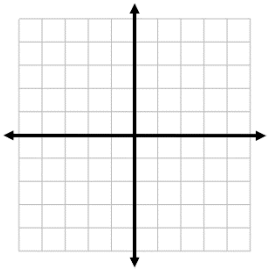
4. $(-4,-3),\ m=\frac{7}{2}$



5. $(0,-5),\ m=3$



6. $(-5,1),\ m=1$



Simplify using order of operations.

1. $5-5\bullet 6=$

2. $3\bullet 2-2+3$

3. $7-6\div 3=$

9. $-2^2=$

10. $(-2)^2=$

11. $6-5+4=$

17. $3^3=$

18. $3^4=$

19. $2^5+4^2=$