

Additional Exercises 3.3**Form I****Slope**

(a) Find the slope of the line passing through the pair of points or state that the slope is undefined. (b) Then indicate whether the line through the points rises, falls, is horizontal or is vertical.

1. $(9, 8)$ and $(-2, 6)$

1a. _____

b. _____

2. $(-11, -10)$ and $(-6, 11)$

2a. _____

b. _____

3. $(-6, 7)$ and $(8, 1)$

3a. _____

b. _____

4. $(-6, 7)$ and $(-6, -2)$

4a. _____

b. _____

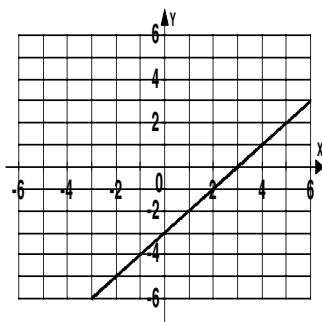
5. $(5, -1)$ and $(-6, -1)$

5a. _____

b. _____

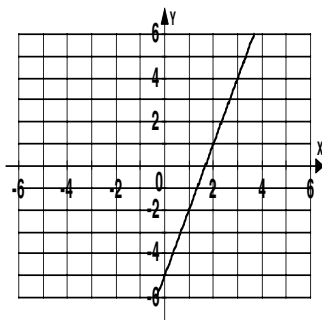
Find the slope of the following lines, or state that the slope is undefined.

6.



6. _____

7.

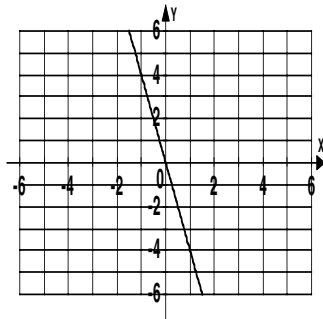


7. _____

Name _____

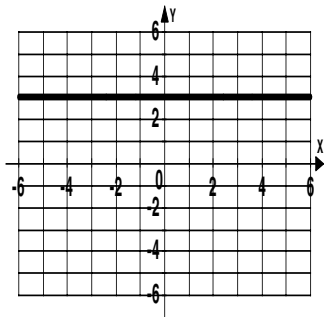
Date _____

8.



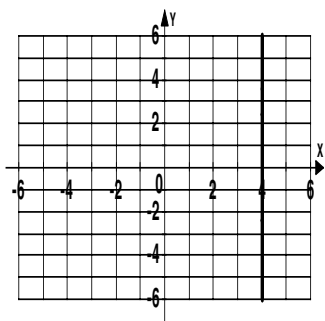
8. _____

9.



9. _____

10.



10. _____

Determine if the lines passing through the given pairs of points are parallel, perpendicular, or neither.

11. Line 1: $(-5, 2)$ and $(7, 4)$
Line 2: $(3, 4)$ and $(9, 5)$

11. _____

12. Line 1: $(4, 0)$ and $(18, -14)$
Line 2: $(-9, -6)$ and $(-2, 1)$

12. _____

13. Line 1: $(-7, 8)$ and $(-27, 26)$
Line 2: $(-5, -10)$ and $(5, -1)$

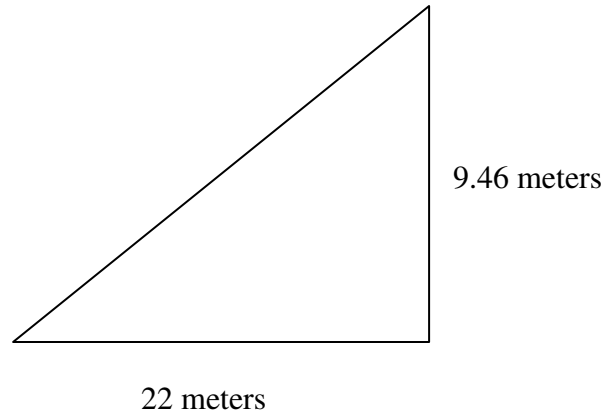
13. _____

Name _____

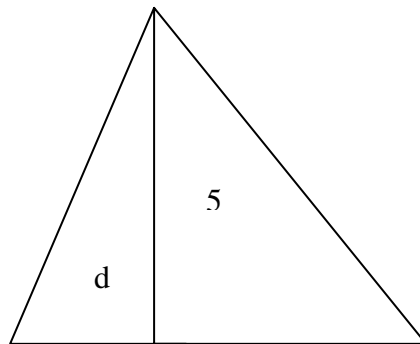
Date _____

Solve.

14. A section of a roller coaster track has the dimensions shown in the diagram. Find the grade of the track, which is the slope written as a percent. Round to the nearest whole percent. 14. _____



15. A tent has the dimensions shown in feet. Find d so that the pitch of the left side of the roof is $\frac{5}{3}$. (The pitch of the roof is the slope.) 15. _____



Additional Exercises 3.3**Form II****Slope**

(a) Find the slope of the line passing through the pair of points or state that the slope is undefined. (b) Then indicate whether the line through the points rises, falls, is horizontal or is vertical.

1. $(6, 7)$ and $(4, 6)$ 1a. _____

b. _____

2. $(3, 4)$ and $(3, -8)$ 2a. _____

b. _____

3. $(2, 4)$ and $(-3, 1)$ 3a. _____

b. _____

4. $(6, 2)$ and $(-4, 8)$ 4a. _____

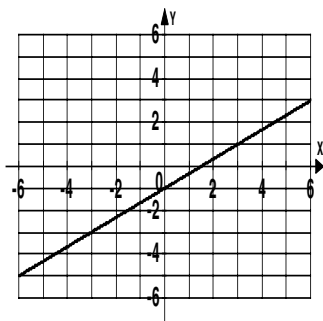
b. _____

5. $(1, 5)$ and $(-7, 5)$ 5a. _____

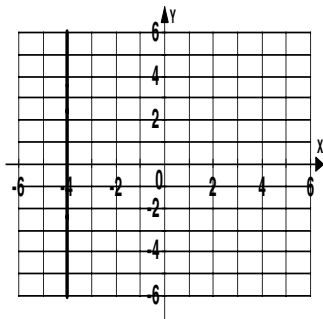
b. _____

Fine the slope of the following lines, or state that the slope is undefined.

6. 6. _____



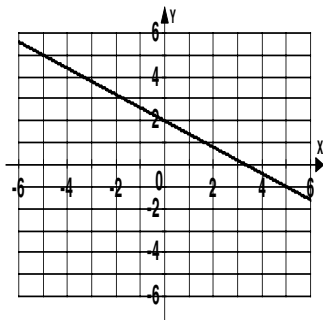
7. 7. _____



Name _____

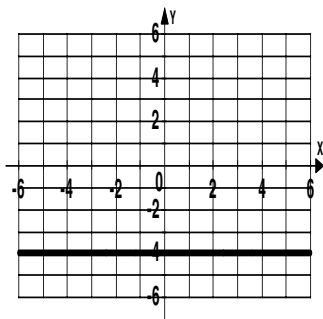
Date _____

8.



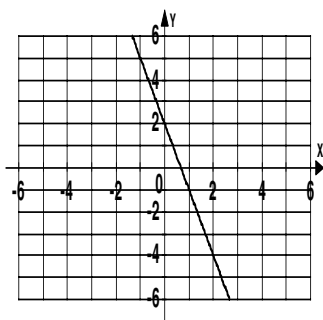
8. _____

9.



9. _____

10.



10. _____

Determine if the lines passing through the given pairs of points are parallel, perpendicular, or neither.

11. Line 1: $(1, -8)$ and $(2, -3)$
Line 2: $(4, 5)$ and $(6, -2)$

11. _____

12. Line 1: $(3, 2)$ and $(-17, 2)$
Line 2: $(5, -8)$ and $(-5, -8)$

12. _____

13. Line 1: $(2, 5)$ and $(3, 1)$
Line 2: $(3, 2)$ and $(7, 3)$

13. _____

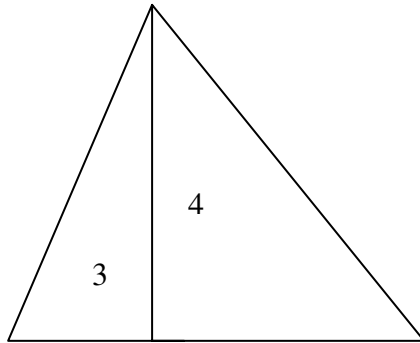
Name _____

Date _____

Solve.

14. A tent has the dimensions shown in feet. Find the pitch (slope) of the left side of the roof.

14. _____



15. The approach ramp used by a daredevil motorcyclist for flying over a collection of flaming barrels of oil has a rise of 44 feet for every 80 feet in horizontal distance. Find the grade of the ramp. Express the grade as a percent.

15. _____

Name _____

Date _____

Additional Exercises 3.3
Form III
Slope

(a) Find the slope of the line passing through the pair of points or state that the slope is undefined. (b) Then indicate whether the line through the points rises, falls, is horizontal or is vertical.

1. (1, 6) and (1, -3) 1a. _____

b. _____

2. (2, 4) and (-3, 5) 2a. _____

b. _____

3. (-3, 7) and (2, -8) 3a. _____

b. _____

4. (7, 2) and (-7, 2) 4a. _____

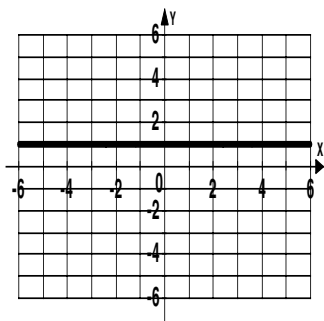
b. _____

5. (5, 1) and (-8, -3) 5a. _____

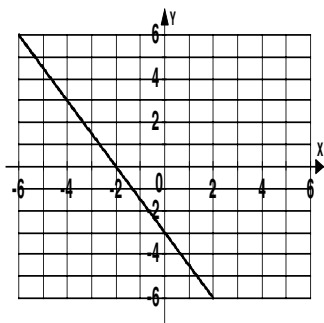
b. _____

Fine the slope of the following lines, or state that the slope is undefined.

6. 6. _____



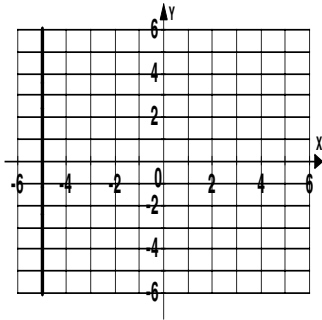
7. 7. _____



Name _____

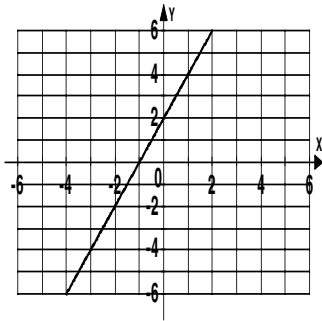
Date _____

8.



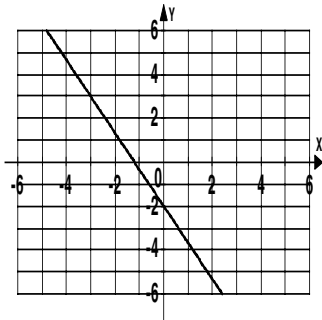
8. _____

9.



9. _____

10.



10. _____

Determine if the lines passing through the given pairs of points are parallel, perpendicular, or neither.

11. Line 1: (1, 5) and (2, 7)
Line 2: (4, 5) and (6, -2)

11. _____

12. Line 1: (6, 4) and (6, 2)
Line 2: (-1, 8) and (2, 8)

12. _____

13. Line 1: (7, -9) and (4, -10)
Line 2: (3, -3) and (6, -2)

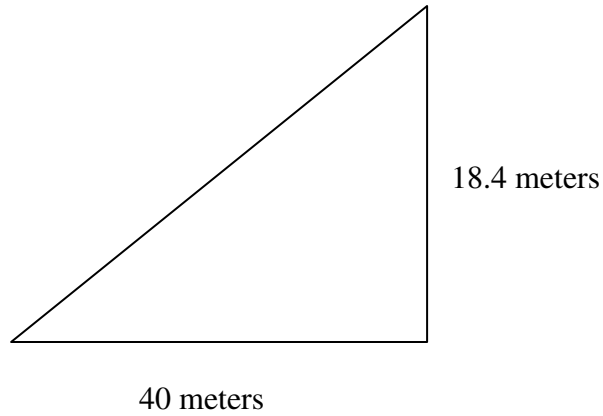
13. _____

Name _____

Date _____

Solve.

14. A section of a roller coaster track has the dimensions shown in the diagram. Find the grade of the track, which is the slope written as a percent. Round to the nearest whole percent. 14. _____



15. The approach ramp used by a daredevil motorcyclist for flying over a collection of flaming barrels of oil has a rise of 52 feet for every 90 feet in horizontal distance. Find the grade of the ramp. Express the grade as a percent rounded to the nearest whole percent. 15. _____