Name _____   Date _____

Additional Exercises 4.3
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. _____

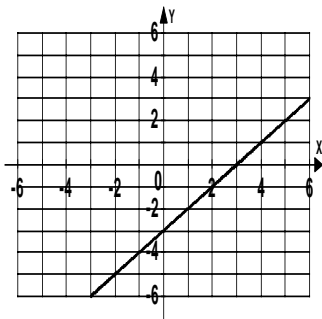   b. _____
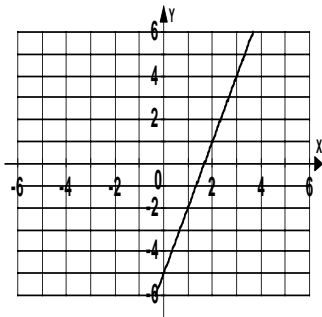
Fine the slope of the following lines .

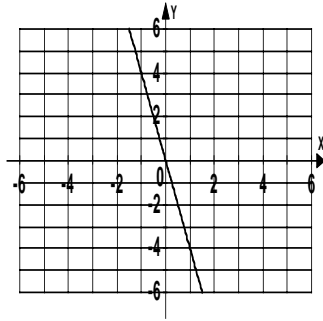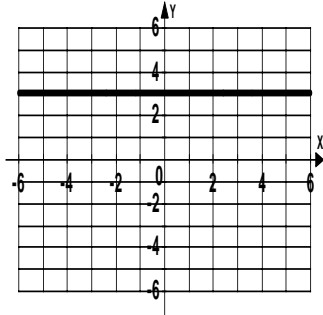6.   6. _____

7.   7. _____

8.
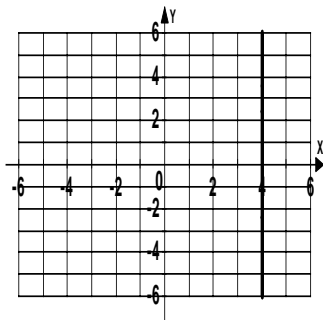

8. _____

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)   11. _____
        Line 2: (3, 4) and (9, 5)

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

13.   Line 1: (–7, 8) and (–27, 26)   13. _____
        Line 2: (–5, –10) and (5, –1)
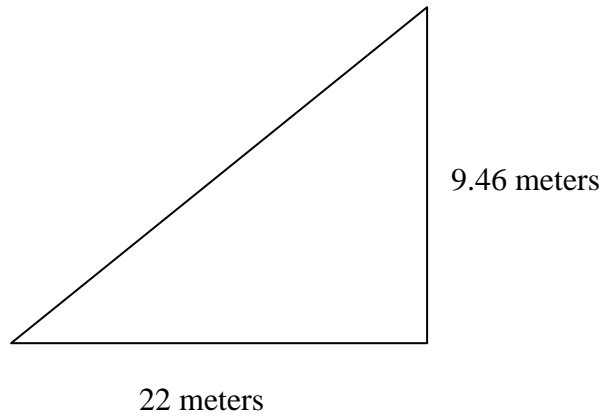
Name _____   Date _____
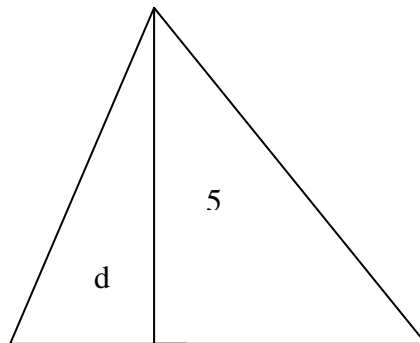
Solve.

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

```
                              /|
                            /  |
                          /    |
                        /      |
                      /        |   9.46 meters
                    /          |
                  /            |
                /_____|
                   22 meters
```

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

```
                    /\
                   /| \
                  / |  \
                 /  |   \   5
                /   |    \
               /  d |     \
              /_____|_____\
```

Name _____   Date _____

Additional Exercises 4.3
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. _____

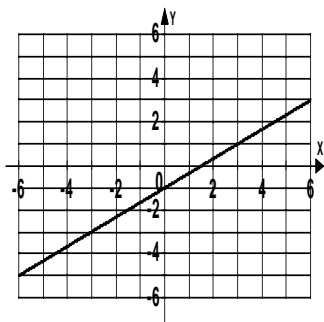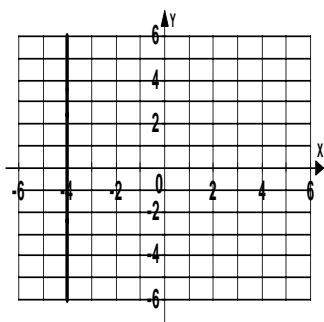Fine the slope of the following lines .

6.   6. _____

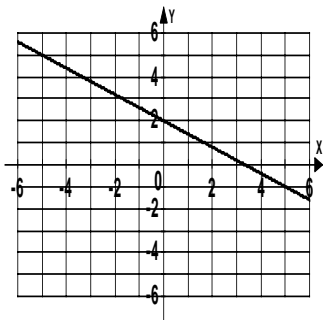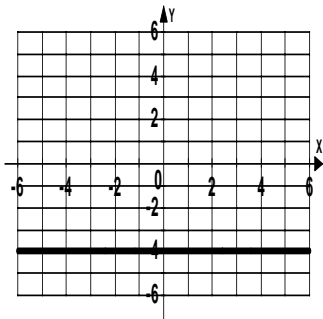7.   7. _____

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8.
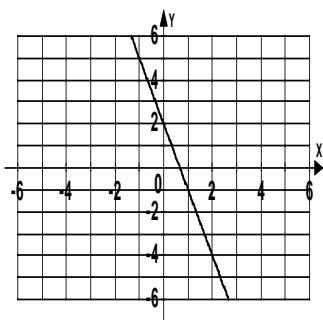

8. _____

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)   11. _____
        Line 2: (4, 5) and (6, –2)

12.   Line 1: (3, 2) and (–17, 2)   12. _____
        Line 2: (5, –8) and (–5, –8)

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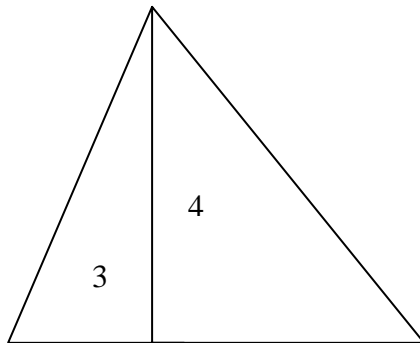   Line 2: (3, 2) and (7, 3)

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Name _____   Date _____

Solve.

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

15.   The approach ramp used by a daredevil motorcyclist for   15. _____
       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. Round the nearest whole percent.

Name _____   Date _____

Additional Exercises 4.3
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. _____

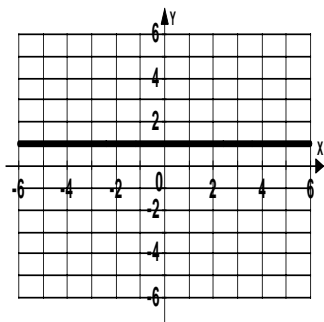   b. _____
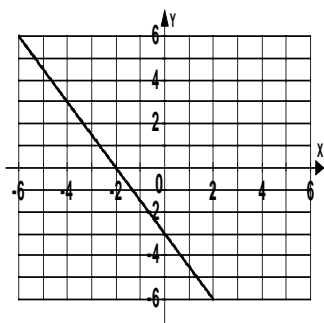
Fine the slope of the following lines .

6.

                                                           6. _____
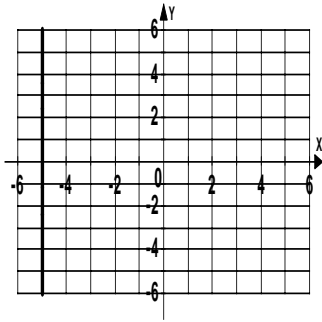
7.

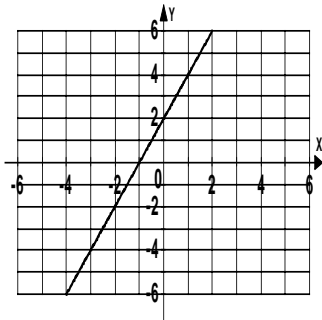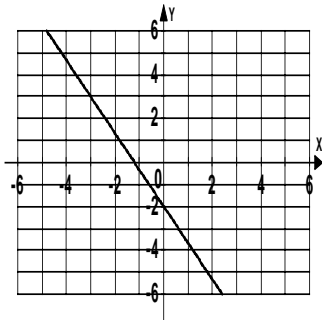   7. _____

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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)   11. _____
       Line 2: (4, 5) and (6, –2)

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

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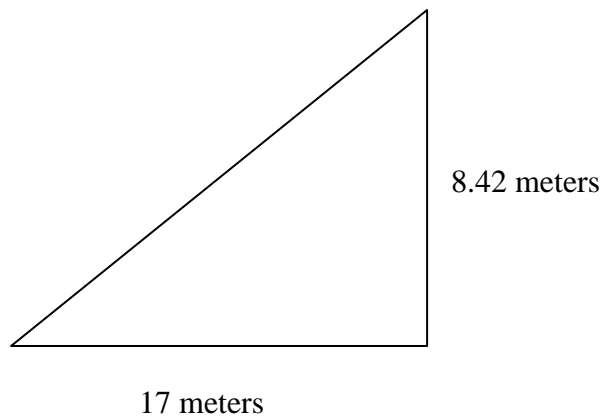   Line 2: (3, –3) and (6, –2)

Name _____   Date _____

Solve.

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

8.42 meters

17 meters

 15.   The approach ramp used by a daredevil motorcyclist for   15. _____
       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. Round the nearest whole percent.