

1-1 Rise Over Run **Assignment**

1. Calculate the slope in the following situations.

a) A wheelchair ramp has a rise of 3 feet and a run of 18 feet.

b) A snowboard jump rises 1.25 m over 5 m of horizontal distance.

c) A roof rises 8 feet over a horizontal distance of 18 feet.

d) A hill rises 10 metres over a horizontal distance of 8 metres.

e) A slide covers 3.5 m of ground and is 2.4 m tall.

2. The slope of a hill is $\frac{3}{190}$. The hill has a rise of 400 m. What is the horizontal distance covered by the hill?

3. The slope of a staircase is 0.95. If it rises 210 cm, what is the run?

4. The slope of a street is 0.54. If it covers 28 m of horizontal distance, what is the rise of the street?

Unit 1: Slope & Rate of Change

Name: _____

5. Leslie works for a shipping company. He regularly carries boxes up and down several stairs and has decided that it would be easier if he built a ramp. The stairs have a rise of 3.5 m for a run of 6.0 m. What is the slope of the stairs?

6. Harry is building a staircase with a slope of 0.89. If the total rise of the staircase is 203 cm, what is the total run of the stairway?

7. The slope of a slide for a playground is to be $\frac{17}{10}$. If the maximum space available for the slide is a horizontal distance of 1.5 m, how high will the slide be?
