



3-7 Solve It!

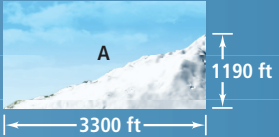


SOLVE IT!


Getting Ready!




Ski resorts often use steepness to rate the difficulty of their hills. The steeper the hill, the higher the difficulty rating. Below are sketches of three new hills at a particular resort. Use each rating level only once. Which hill gets which rating? Explain.



A



B



C

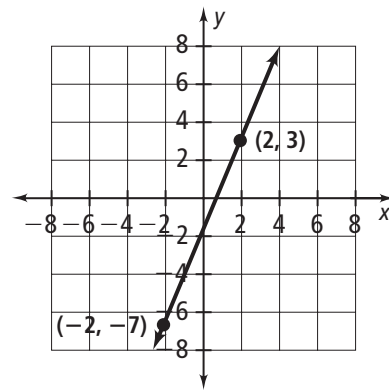
Difficulty Ratings

- Easiest
- Intermediate
- ◆ Difficult

Think back!
What did you learn in algebra that relates to steepness?

3-7 Lesson Quiz

1. What is the slope of the line below?
2. Write the equation of the line shown in Exercise 1. Express your answer in point-slope form.
3. What is an equation of the line with slope -3 and y -intercept 6 ? Express your answer in slope-intercept form.
4. What are the equations for the horizontal and vertical lines through $(-2, 0)$?
5. Do you UNDERSTAND? Which has a greater slope, a horizontal line or a vertical line?



Answers

Solve It!

The slopes of A, B, and C are $\frac{119}{330}$, $\frac{59}{150}$, and $\frac{23}{70}$.
 $\frac{23}{70} < \frac{119}{330} < \frac{59}{150}$, so C is easiest, A is intermediate, and B is difficult.

Lesson Quiz

1. 2.5 or $\frac{5}{2}$
2. $y - 3 = 2.5(x - 2)$
3. $y = -3x + 6$
4. horizontal $y = 0$,
vertical $x = -2$

5. A vertical line has no defined slope, so the comparison cannot be made.