Slope Practice

Choose one answer per question. Circle A, B, C, or D.

1. One step along a line goes 8 grid units right and 3 grid units up. What is the slope?
   A. 3/8
   B. 8/3
   C. −3/8
   D. 11

2. On a scale drawing, a straight roof edge goes downward as you look from left to right. What does that tell you about its slope?
   A. The slope is zero.
   B. The slope is positive.
   C. The slope is negative.
   D. The slope is undefined.

3. What is the slope of the line through (−5, 4) and (8, 4)?
   A. 4
   B. 0
   C. 13
   D. Undefined

4. What is the slope of the line through (6, −3) and (6, 11)?
   A. 14
   B. 0
   C. 6
   D. Undefined

5. What is the slope of the line y = 7 − 2x?
   A. 2
   B. −2
   C. 7
   D. −7

6. A line passes through (−4, 7) and (2, −2). What is its slope?
   A. −3/2
   B. 3/2
   C. −2/3
   D. −9/2

7. Three rows of a linear table give (x, y) pairs (1, −4), (3, 1), and (7, 11). What slope do the rows show?

A. −5/2
B. 5
C. 2/5
D. 5/2

8. A printer uses a steady amount of ink per page. It has 113 mL left after 12 pages and 108 mL left after 32 pages. What is the slope of ink remaining versus pages printed?

A. −4 mL per page
B. 0.25 mL per page
C. −0.25 mL per page
D. −5 mL per page

9. Which equation represents a different line parallel to y = (2/5)x + 1?

A. 2x − 5y = 15
B. 5x + 2y = 10
C. 2x + 5y = 5
D. 2x − 5y = −5

10. A nonvertical line has slope −4/7. What is the slope of a line perpendicular to it?

A. −4/7
B. −7/4
C. 4/7
D. 7/4

11. A line has slope 5/4 and passes through (−2, 3) and (6, b). What is b?

A. −7
B. 10
C. 13
D. 8

12. A station's (minutes, packets packed) readings are (0, 5), (4, 17), (10, 41), and (13, 56). Over which interval was its average packing rate highest?

A. Minutes 4 to 10
B. Minutes 10 to 13
C. Minutes 0 to 4
D. The average rates match on all three intervals.

13. Line A passes through (1, −2) and (7, 1). Which equation describes a line through (3, 4) perpendicular to line A?

A. y = (1/2)x + 5/2
B. y = −2x + 4
C. y = 2x − 2
D. y = −2x + 10

14. Dispenser A loses 4.8 meters of tape per hour. Dispenser B loses 6 centimeters per minute. With both graphs showing meters left versus hours, whose slope is more negative, and by how much?

A. A, by 1.2 meters per hour
B. B, by 1.2 meters per hour
C. A, by 4.2 meters per hour
D. The slopes are equal.

15. Studio plan A costs $18 for 2 hours and $34 for 6 hours. Plan B costs $24 for 2 hours and $32 for 6 hours. Each plan has a constant hourly rate and a fixed fee. When do the total costs match, and at what price?

A. 5 hours at $28
B. 4 hours at $26
C. 5 hours at $30
D. 6 hours at $34