

Chapter 4 Test, Form 1

SCORE _____

Assessment

Write the letter for the correct answer in the blank at the right of each question.

For Questions 1–4, find the equation in slope-intercept form that describes each line.

1. a line with slope -2 and y -intercept 4

- A $y = -2x$ B $y = 4x - 2$ C $y = -2x + 4$ D $y = 2x - 4$ 1. _____

2. a line through $(2, 4)$ with slope 0

- F $y = 2$ G $x = 2$ H $y = 4$ J $x = 4$ 2. _____

3. a line through $(4, 2)$ with slope $\frac{1}{2}$

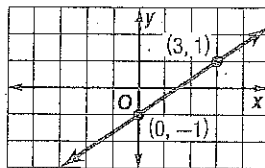
- A $y = -\frac{1}{2}x$ B $y = \frac{1}{2}x - 4$ C $y = 2x - 10$ D $y = \frac{1}{2}x$ 3. _____

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

- F $y = \frac{2}{3}x + \frac{5}{3}$ G $y = -\frac{2}{3}x + \frac{5}{3}$ H $y = \frac{2}{3}x - \frac{5}{3}$ J $y = -\frac{2}{3}x - \frac{5}{3}$ 4. _____

5. the line graphed at the right

- A $y = \frac{2}{3}x - 1$ C $y = \frac{2}{3}x + \frac{3}{2}$
 B $y = \frac{3}{2}x - 1$ D $y = \frac{3}{2}x + \frac{3}{2}$



5. _____

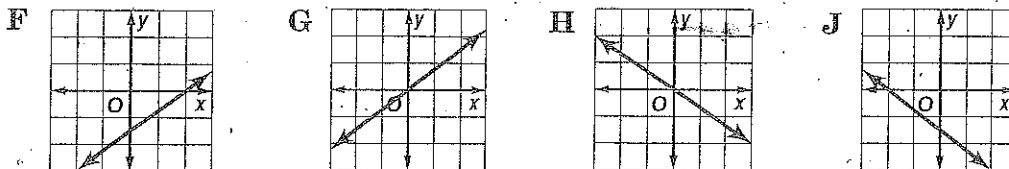
6. If 5 deli sandwiches cost \$29.75, how much will 8 sandwiches cost?

- F \$37.75 G \$29.75 H \$47.60 J \$0.16 6. _____

7. What is the standard form of $y - 8 = 2(x + 3)$?

- A $2x + y = 14$ B $y = 2x + 14$ C $2x - y = -14$ D $y - 2x = 11$ 7. _____

8. Which is the graph of $3x - 4y = 6$



8. _____

9. Which is the point-slope form of an equation for the line that passes through $(0, -5)$ with slope 2 ?

- A $y = 2x - 5$ B $y + 5 = 2x$ C $y - 5 = x - 2$ D $y = 2(x + 5)$ 9. _____

10. What is the slope-intercept form of $y + 6 = 2(x + 2)$?

- F $y = 2x - 6$ G $y = 2x - 2$ H $y = 2x + 6$ J $2x - y = 6$ 10. _____

11. When are two lines parallel?

- A when the slopes are opposite
 B when the slopes are equal 11. _____
 C when the slopes are positive
 D when the product of the slopes is 1

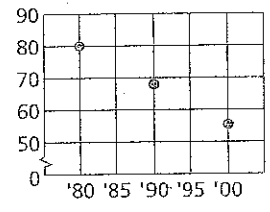
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12. Find the slope-intercept form of an equation for the line that passes through $(-1, 2)$ and is parallel to $y = 2x - 3$.
 F $y = 2x + 4$ G $y = 0.5x + 4$ H $y = 2x + 3$ J $y = -0.5x - 4$ 12. _____

13. Find the slope-intercept form of an equation of the line perpendicular to the graph of $x - 3y = 5$ and passing through $(0, 6)$.
 A $y = \frac{1}{3}x - 2$ B $y = -3x + 6$ C $y = \frac{1}{3}x + 2$ D $y = 3x - 6$ 13. _____

For Questions 14 and 15, use the scatter plot shown.

14. How would you describe the relationship between the x - and y -values in the scatter plot?
 F strong negative correlation
 G weak negative correlation
 H weak positive correlation
 J strong positive correlation



15. Based on the data in the scatter plot, what would you expect the y -value to be for $x = 2010$?
 A greater than 80 C between 65 and 50
 B between 80 and 65 D less than 50 15. _____

16. Which equation has a slope of 2 and a y -intercept of -5 ?
 F $y = -5x + 2$ G $y = 5x + 2$ H $y = 2x + 5$ J $y = 2x - 5$ 16. _____

17. Which correlation coefficient corresponds to the best-fit line that most closely models its set of data?
 A 0.84 B 0.13 C -0.87 D -0.15 17. _____

18. The table below shows Mia's bowling score each week she participated in a bowling league:

Week	1	2	3	4	5	6
Score	122	131	130	133	145	139

- Use the median-fit line to estimate Mia's score for week 16.
 F 173 G 180 H 182 J 257 18. _____

19. If $f(x) = 2[x]$, find $f\left(-\frac{1}{4}\right)$.
 A -2 B $-\frac{1}{2}$ C 0 D $\frac{1}{2}$ 19. _____

20. What is the range of $f(x) = |3x + 1|$?
 F all reals G all positive reals
 H all reals ≥ 1 J all reals $\geq \frac{1}{3}$ 20. _____

Bonus Find the value of r in $(4, r)$, $(r, 2)$ so that the slope of the line containing them is $-\frac{5}{3}$.
 B: _____

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