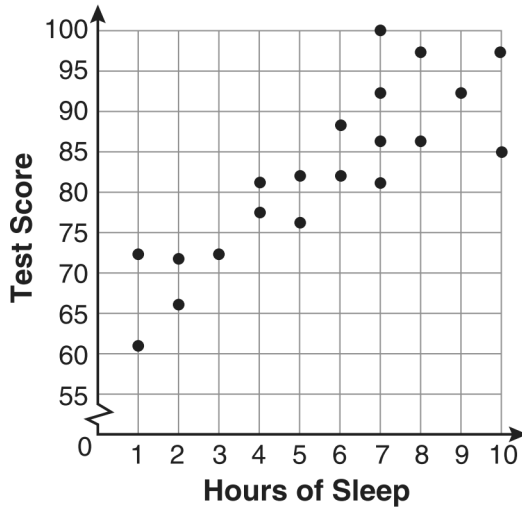


CRCT Quiz #9

Name: _____

Date: _____

1. What is the relationship between the independent and dependent variables in the scatter plot shown below?



- A. undefined correlation
 B. negative correlation
 C. positive correlation
 D. no correlation

2. Tim ate four more cookies than Alice. Bob ate twice as many cookies as Tim. If x represents the number of cookies Alice ate, which expression represents the number of cookies Bob ate?

- A. $2 + (x + 4)$ B. $2x + 4$
 C. $2(x + 4)$ D. $4(x + 2)$

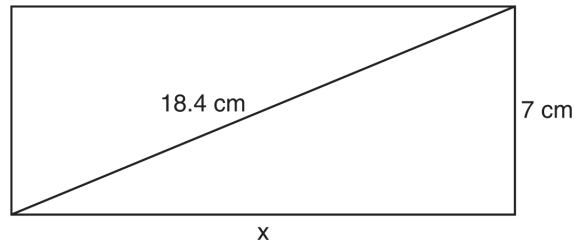
3. Which relation is a function?

- A. $\{(\frac{3}{4}, 0), (0, 1), (\frac{3}{4}, 2)\}$
 B. $\{(-2, 2), (-\frac{1}{2}, 1), (-2, 4)\}$
 C. $\{(-1, 4), (0, 5), (0, 4)\}$
 D. $\{(2, 1), (4, 3), (6, 5)\}$

4. What is the value of x in the equation $2(x - 4) = 4(2x + 1)$?

- A. -2 B. 2 C. $-\frac{1}{2}$ D. $\frac{1}{2}$

5. The rectangle shown below has a diagonal of 18.4 cm and a width of 7 cm.



To the *nearest centimeter*, what is the length, x , of the rectangle?

- A. 11 B. 17 C. 20 D. 25

6. What is the value of the expression $(a^3 + b^0)^2$ when $a = -2$ and $b = 4$?

- A. 64 B. 49 C. -49 D. -64

CRCT Quiz #9

7. Which value of x is the solution of the equation $\frac{2}{3}x + \frac{1}{2} = \frac{5}{6}$

- A. $\frac{1}{2}$ B. 2 C. $\frac{2}{3}$ D. $\frac{3}{2}$

8. Josh and Mae work at a concession stand. They each earn \$8 per hour. Josh worked three hours more than Mae. If Josh and Mae earned a total of \$120, how many hours did Josh work?

- A. 6 B. 9 C. 12 D. 15

9. What is $3\sqrt{2} + \sqrt{8}$ expressed in simplest radical form?

- A. $3\sqrt{10}$ B. $3\sqrt{16}$ C. $5\sqrt{2}$ D. $7\sqrt{2}$

10. What is the slope of the line whose equation is $3x - 7y = 9$?

- A. $-\frac{3}{7}$ B. $\frac{3}{7}$ C. $-\frac{7}{3}$ D. $\frac{7}{3}$

11. The expression $\frac{(10w^3)^2}{5w}$ is equivalent to

- A. $2w^5$ B. $2w^8$ C. $20w^5$ D. $20w^8$

12. If $\frac{ey}{n} + k = t$, what is y in terms of e , n , k , and t ?

- A. $y = \frac{tn + k}{e}$ B. $y = \frac{tn - k}{e}$
C. $y = \frac{n(t + k)}{e}$ D. $y = \frac{n(t - k)}{e}$

13. What is the result when $2x^2 + 3xy - 6$ is subtracted from $x^2 - 7xy + 2$?

- A. $-x^2 - 10xy + 8$ B. $x^2 + 10xy - 8$
C. $-x^2 - 4xy - 4$ D. $x^2 - 4xy - 4$

14. A line having a slope of $\frac{3}{4}$ passes through the point $(-8, 4)$. Write the equation of this line in slope-intercept form.

- | | |
|---------|------------------------|
| 1. | |
| Answer: | C |
| 2. | |
| Answer: | C |
| 3. | |
| Answer: | D |
| 4. | |
| Answer: | A |
| 5. | |
| Answer: | B |
| 6. | |
| Answer: | B |
| 7. | |
| Answer: | A |
| 8. | |
| Answer: | B |
| 9. | |
| Answer: | C |
| 10. | |
| Answer: | B |
| 11. | |
| Answer: | C |
| 12. | |
| Answer: | D |
| 13. | |
| Answer: | A |
| 14. | |
| Answer: | $y = \frac{3}{4}x + 1$ |