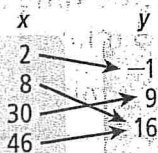


3 Topic Assessment Form A**Practice Test**

1. Which relation is a function?

- (A) $(1, 0), (3, 0), (1, 1), (3, 1), (1, 3)$
 (B) $(1, 1), (2, 2), (3, 3), (4, 4), (5, 8)$
 (C) $(2, 7), (6, 5), (4, 4), (3, 3), (2, 1)$
 (D) $(9, -3), (9, 3), (4, -2), (4, 2), (0, 0)$

2. Identify the domain and range of the relation.



domain: _____

range: _____

3. What is the best description of the relation in Item 2?

- (A) a function that is one-to-one
 (B) a function that is many-to-one
 (C) a function that is one-to-many
 (D) a relation that is not a function

4. Jack works after school. Each day he earns a set amount, plus an hourly wage. Write a linear function f Jack can use to determine his pay.

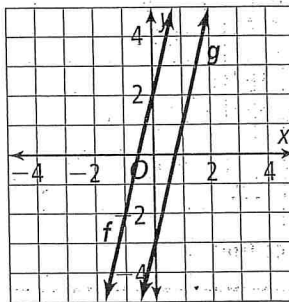
Hours	1	1.5	2	2.5	3
Pay	18	23	28	33	38

5. Which is a reasonable domain for the function in Item 4?

- (A) $0 < x < 6$ (C) $0 < x < 68$
 (B) $0 < x < 24$ (D) $0 < x < 248$

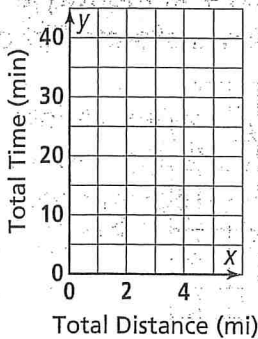
6. In Item 4, assume Jack works from 2:30 P.M. to 7:00 P.M. How much would he earn?

- (A) \$33 (C) \$45
 (B) \$35.50 (D) \$53

7. Given $f(x) = -x + 6$ and $g(x) = f(x + 3)$, write an equation for function g .8. Given $g(x) = f(x) + k$, identify a value of k that transforms f into g . $k =$ _____

12. Each day, Yumiko exercises by first doing sit-ups and then running. Make a scatter plot of the total time she exercises as a function of the distance she runs. Draw a trend line.

Distance (mi)	2	2.5	3	3.5	4
Time (min)	23	28	34	34	40



13. What type of correlation does the scatter plot in Item 12 show?

- (A) positive
 (B) negative
 (C) none
 (D) cannot tell

14. Which of the following equations is the best trend line for the data in Item 12?

- (A) $y = 6x + 12$
 (B) $y = 8x + 15$
 (C) $y = 6x + 6$
 (D) $y = 8x + 8$

15. What does the y-intercept of the line in Item 12 represent?

- (A) average time spent doing sit-ups
 (B) average time spent running
 (C) total time spent running
 (D) average distance run

16. In Item 12, estimate the time it will take Yumiko to run 5 mi.

estimate: about _____ min