

Name \_\_\_\_\_

**1** Which value of  $r$  represents data with a strong negative linear correlation between two variables?

- (1)  $-1.07$                       (3)  $-0.14$   
 (2)  $-0.89$                       (4)  $0.92$

**2** Granola bars cost \$0.55 each. Which table represents this relationship?

Number of Bars	Total Cost
0	\$0.00
2	1.00
4	2.00

(1)

Number of Bars	Total Cost
0	\$0.55
2	0.55
4	0.55

(3)

Number of Bars	Total Cost
0	\$0.00
2	1.10
4	2.20

(2)

Number of Bars	Total Cost
0	\$0.55
2	1.10
4	2.20

(4)

**3** A ship sailed  $t$  miles on Tuesday and  $w$  miles on Wednesday. Which expression represents the average distance per day traveled by the ship?

- (1)  $2(t + w)$                       (3)  $\frac{t + w}{2}$   
 (2)  $t + \frac{w}{2}$                       (4)  $t - w$

**4** Which equation represents the line whose slope is 2 and whose  $y$ -intercept is 6?

- (1)  $y = 2x + 6$                       (3)  $2y + 6x = 0$   
 (2)  $y = 6x + 2$                       (4)  $y + 2x = 6$

**5** What is the solution for the equation  $x + 1 = x + 2$ ?

- (1)  $-1$                                       (3) all real numbers  
 (2)  $\frac{1}{2}$                                       (4) There is no solution.

**6** The expression  $(-2a^2b^3)(4ab^5)(6a^3b^2)$  is equivalent to

- (1)  $8a^6b^{30}$                               (3)  $-48a^6b^{10}$   
 (2)  $48a^5b^{10}$                               (4)  $-48a^5b^{10}$

**7** Which equation has the solution set  $\{1,3\}$ ?

- (1)  $x^2 - 4x + 3 = 0$                       (3)  $x^2 + 4x + 3 = 0$   
 (2)  $x^2 - 4x - 3 = 0$                       (4)  $x^2 + 4x - 3 = 0$

**8** Subtract  $2x^2 - 5x + 8$  from  $6x^2 + 3x - 2$  and express the answer as a trinomial.

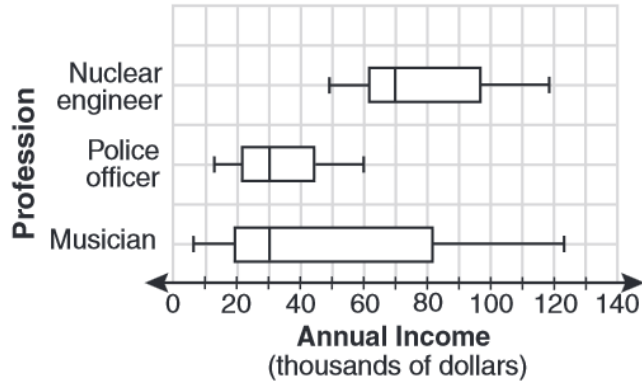
monday

tuesday

Name \_\_\_\_\_

The accompanying box-and-whisker plots can be used to compare the annual incomes of three professions.

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Based on the box-and-whisker plots, which statement is true?

- (1) The median income for nuclear engineers is greater than the income of all musicians.
- (2) The median income for police officers and musicians is the same.
- (3) All nuclear engineers earn more than all police officers.
- (4) A musician will eventually earn more than a police officer.

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Mr. Braun has \$75.00 to spend on pizzas and soda pop for a picnic. Pizzas cost \$9.00 each and the drinks cost \$0.75 each. Five times as many drinks as pizzas are needed. What is the maximum number of pizzas that Mr. Braun can buy?

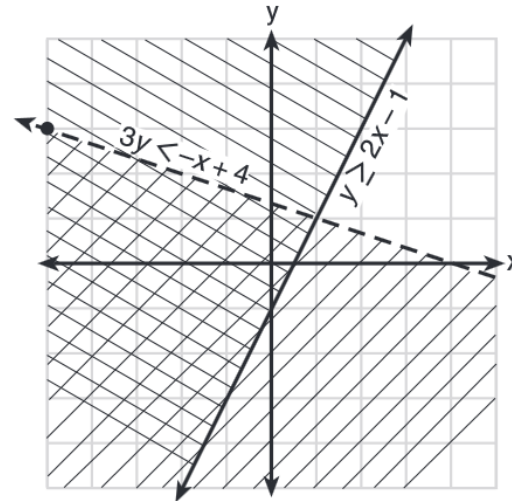
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Which property of real numbers is illustrated by the equation  $52 + (27 + 36) = (52 + 27) + 36$ ?

- (1) commutative property
- (2) associative property
- (3) distributive property
- (4) identity property of addition

Which point is a solution for the system of inequalities shown on the accompanying graph?

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- (1) (-4,-1)
- (2) (2,3)
- (3) (1,1)
- (4) (-2,2)

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For which equation is the solution set  $\{-5,2\}$ ?

- (1)  $x^2 + 3x - 10 = 0$
- (2)  $x^2 - 3x = 10$
- (3)  $x^2 + 3x = -10$
- (4)  $x^2 - 3x + 10 = 0$

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A line with a slope of  $\frac{1}{3}$  passes through the point (3,6). Which point also lies on this line?

- (1) (6,3)
- (2) (7,6)
- (3) (-3,-3)
- (4) (-6,3)