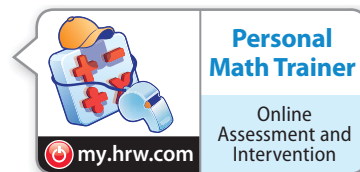


Review Test



Selected Response

1. Evaluate $a + b$ for $a = 34$ and $b = -6$.

- (A) 28 (C) -28
(B) 40 (D) -40

2. A triangle has sides with lengths of $5x - 7$, $3x - 4$, and $2x - 6$. What is the perimeter of the triangle?

- (A) $10x - 17$ (C) $4x - 9$
(B) $6x - 17$ (D) $-7x$

3. Which of the following ratios does *not* form a proportion?

- (A) $\frac{28}{49} = \frac{4}{7}$ (C) $\frac{4}{7} = \frac{16}{35}$
(B) $\frac{4}{7} = \frac{16}{28}$ (D) $\frac{4}{7} = \frac{20}{35}$

4. For a sale, a store decreases its prices on all items by 25%. An item that cost \$120 before the sale now costs $\$120 - 0.25(\$120)$. What is another expression for the sale price?

- (A) $\$120 - 25$ (C) $0.25(\$120)$
(B) $0.75(\$120)$ (D) $\$120 - 75$

5. Write an equation that models the situation and find its solution.

It's going to be Lindsay's birthday soon, and her friends Mary, Mikhail, Anne, Kim, Makoto, and Isabel have contributed equal amounts of money to buy her a present. They have \$36.00 to spend between them. Determine how much each contributed.

- (A) $6x = \$36.00;$ (C) $6x = \$36.00;$
 $x = \$108.00$ $x = \$216.00$
(B) $7x = \$36.00;$ (D) $6x = \$36.00$
 $x = \$5.14$ $x = \$6.00$

6. Solve $4(a + 4) - 2 = 34$.

- (A) $a = -5$ (C) $a = 5$
(B) $a = 8$ (D) $a = -8$

7. Four sisters bought a present for their father. They received a 10% discount on the original price of the gift. After the discount was taken, each sister paid \$9.00. What was the original price of the gift?

- (A) \$40.00 (C) \$16.00
(B) \$36.00 (D) \$32.73

8. Justin is redoing his bathroom floor with tiles measuring 6 in. by 13 in. The floor has an area of 8,500 in². What is the least number of tiles he will need?

- (A) 448 tiles (C) 109 tiles
(B) 108.97 tiles (D) 108 tiles

9. One winter day, the temperature ranged from a high of 20 °F to a low of -25 °F. By how many degrees did the temperature change?

- (A) -5 °F (C) -15 °F
(B) 55 °F (D) 45 °F

10. Terry drove 310 miles in 5 hours at a constant speed. How long would it take him to drive 403 miles at the same speed?

- (A) 3 hours (C) 7 hours
(B) 6.5 hours (D) 62 hours

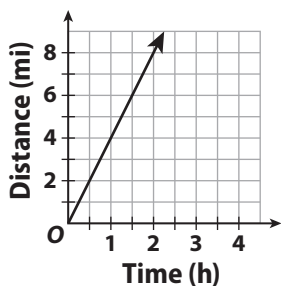
11. 128 is 74% of what number? If necessary, round your answer to the nearest hundredth.

- (A) 0.58 (C) 1.73
(B) 94.72 (D) 172.97

12. Tell whether the data show a direct variation. If so, identify the constant of variation.

Number of Baskets	Cost
5	\$15
7	\$21
9	\$27
13	\$39
15	\$45

- (A) direct variation; $k = \frac{1}{3}$
 (B) not a direct variation
 (C) direct variation; $k = 3$
 (D) direct variation; $k = 10$
13. The graph shows the distance Jamie walks over time. Does she walk at a constant or variable speed? How fast is Jamie walking?



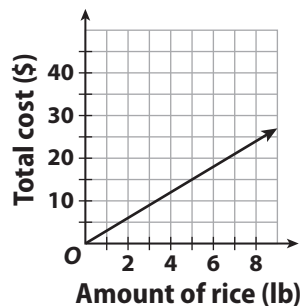
- (A) variable speed; 8 mi/h
 (B) constant speed; 4 mi/h
 (C) constant speed; 2 mi/h
 (D) constant speed; 8 mi/h
14. Darryl is reading a book at the rate of 4.5 pages per minute. What ordered pair on a graph of his reading rate would represent the number of minutes it would take him to read 90 pages?
- (A) (20, 90)
 (B) (4.5, 20)
 (C) (90, 4.5)
 (D) (4.5, 90)

Mini-Tasks

15. The water level in a plastic pool changed by -8 gallons each hour due to a small hole in the bottom. After 6 hours, the pool contained 132 gallons. How much water was in the pool originally?
- _____
16. The ratio of adults to children attending a new exhibit at the museum was found to be 8:5. Based on this ratio, if 390 people attended one day, how many would be children?
- _____

Performance Task

17. The graph shows the relationship between the total cost and the number of pounds of rice purchased.



Part A: What does (6, 18) represent?

Part B: Which point represents the unit price?

Part C: How many pounds would you have to buy for the total to be \$12? Explain how to find the answer.
