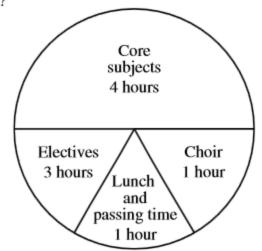
## Titan Learning Center Mathematics ACT Prep Set A Week 4

Solve each problem, circling the correct answers. Remember that figures are not necessarily drawn to scale.

1. Antwan drew the circle graph below describing his time spent at school in 1 day. His teacher said that the numbers of hours listed were correct, but that the central angle measures for the sectors were not correct. What should be the central angle measure for the Core subjects sector?



- F. 72° G. 80° H. 160° J. 200°
- K. 288°
- 2. Which of the following expressions is equivalent to

$$\frac{1}{2}y^2(6x + 2y + 12x - 2y) ?$$

- A.  $9xy^2$
- **B.** 18xy
- C.  $3xy^2 + 12x$
- **D.**  $9xy^2 2y^3$
- E.  $3xy^2 + 12x y^3 2y$
- 3. In scientific notation, 670,000,000 + 700,000,000 = ?
  - **A.**  $1.37 \times 10^{-9}$
  - **B.**  $1.37 \times 10^7$
  - C.  $1.37 \times 10^8$
  - **D.**  $1.37 \times 10^9$
  - **E.**  $137 \times 10^{15}$

4. The table below shows the number of cars Jing sold each month last year. What is the median of the data in the table?

Month	Number of cars sold
111011111	Trumber of cars sore
January	25
February	15
March	22
April	19
May	16
June	13
July	19
August	25
September	26
October	27
November	28
December	29

F. 13 G. 16 H. 19 J. 20.5 K. 23.5

- 5. A car accelerated from 88 feet per second (fps) to 220 fps in exactly 3 seconds. Assuming the acceleration was constant, what was the car's acceleration, in feet per second per second, from 88 fps to 220 fps?
  - F.  $\frac{1}{44}$
  - G.  $29\frac{1}{3}$
  - H. 44
  - **J.**  $75\frac{1}{3}$
  - **K.**  $102\frac{2}{3}$

**TLC Stamp**