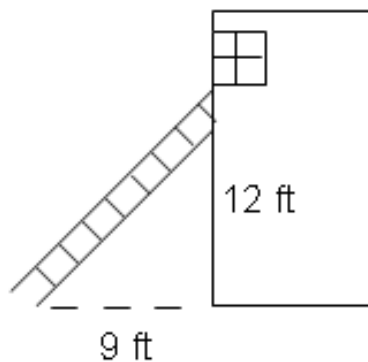




11. If a ladder is placed 9 feet from the base of a wall and must reach a window that is 12 feet off the ground, how long must the ladder be?



- A. 9 feet
- B. 14 feet
- C. 15 feet
- D. 21 feet

12. The perimeter of a box is most likely expressed in which of the following units?

- A. feet
- B. liters
- C. square inches
- D. cubic inches

13. Out of 60 sandwiches prepared for lunch, 22 are turkey, 18 are peanut butter, and the rest are ham. If one sandwich is randomly picked, what is the probability of picking a ham sandwich?

- A.  $\frac{1}{3}$
- B.  $\frac{11}{30}$
- C.  $\frac{3}{10}$
- D.  $\frac{2}{3}$

14. An artist charged Mr. Freemont a flat rate of \$250 plus an additional \$40 per hour to paint a portrait of his wife. This can be represented by the equation  $C = 250 + 40h$ . If Mr. Freemont's bill was \$570, for how many hours did the artist bill him?

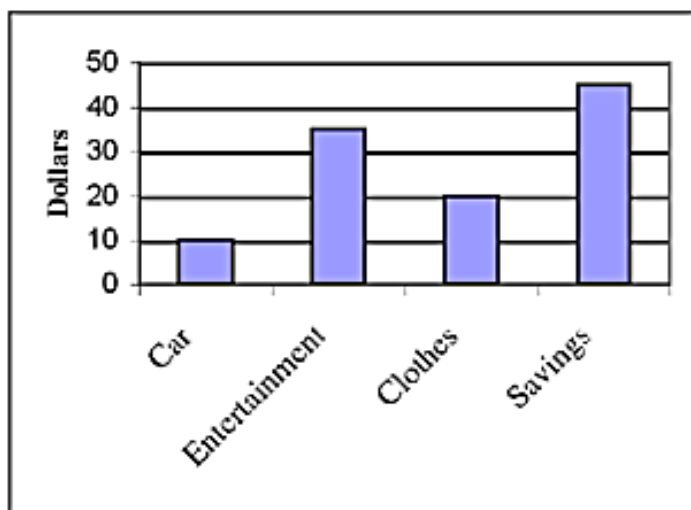
- A. 6 hours
- B. 7 hours
- C. 8 hours
- D. 9 hours

15. If  $x^4 = 150$  and  $x$  is a real number, then  $x$  lies between what two consecutive integers?

- A. 2 and 3
- B. 3 and 4
- C. 4 and 5
- D. 5 and 6

16. The graph below shows how Bruce spends his weekly earnings. Approximately what percent of Bruce's money is spent on entertainment?

- A. 20%
- B. 30%
- C. 40%
- D. 50%

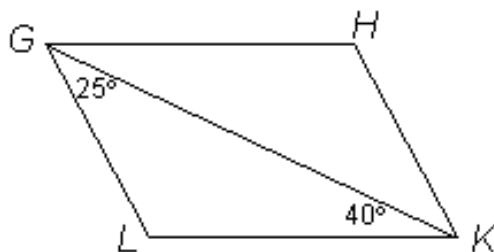


17. Margaret can type at a speed of 30 words per minute. At this rate, how long would it take her to type 450 words?

- A. 5 minutes
- B. 15 minutes
- C. 20 minutes
- D. 1350 minutes

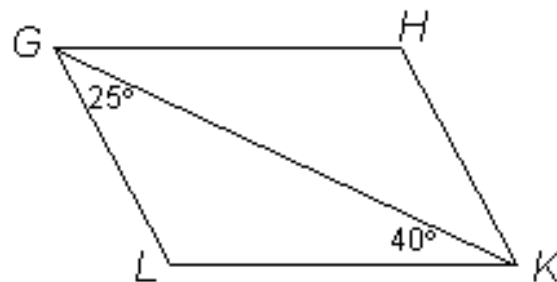
18. In the parallelogram below, what is the measure of angle  $HGK$ ?

- A.  $25^\circ$
- B.  $40^\circ$
- C.  $65^\circ$
- D.  $140^\circ$



18. In the parallelogram below, what is the measure of angle  $HGK$ ?

- A.  $25^\circ$
- B.  $40^\circ$
- C.  $65^\circ$
- D.  $140^\circ$



19. Which statement is represented by the algebraic expression  $h - 21$ ?

- A. Total height  $h$  more than 21.
- B. Twenty-one less than the total height  $h$ .
- C. Twenty-one decreased by total height  $h$ .
- D. Twenty-one reduced by total height  $h$ .

20. Which type of data would be best represented with a circle graph?

- A. The different types of music that men prefer compared to the types of music that women prefer.
- B. Which class at the high school fundraiser-freshmen, sophomores, juniors, or seniors-sold the most candy.
- C. How certain stock values have increased over the past 6 months.
- D. A comparison of the medians of two data sets.

### Answer Key for problems 11-20

|           |          |
|-----------|----------|
| <b>11</b> | <b>C</b> |
| <b>12</b> | <b>A</b> |
| <b>13</b> | <b>A</b> |
| <b>14</b> | <b>C</b> |
| <b>15</b> | <b>B</b> |
| <b>16</b> | <b>B</b> |
| <b>17</b> | <b>B</b> |
| <b>18</b> | <b>B</b> |
| <b>19</b> | <b>B</b> |
| <b>20</b> | <b>B</b> |