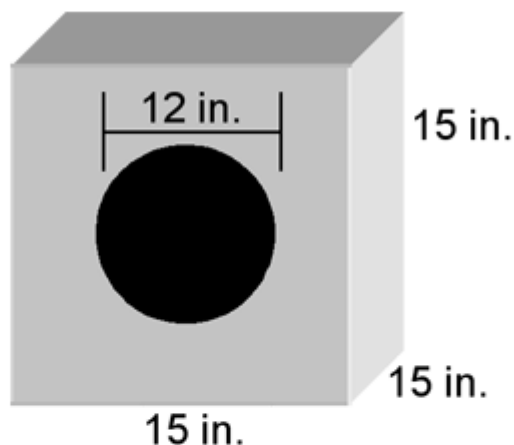




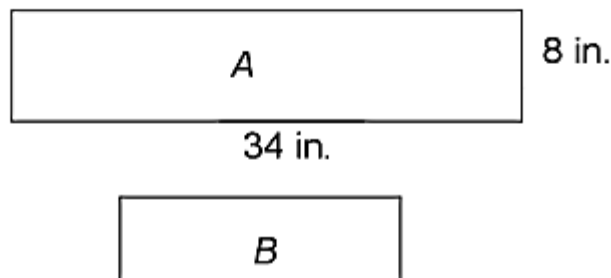
11. A company is manufacturing the special ordered part shown below. The company charges by the number of cubic inches of volume contained within the nut. In order to determine a fair price you have been asked to determine the volume of the part. Find the volume to the nearest whole number. (Note: The part is a cube with a cylinder removed from its center.)

- F. 840 cubic inches
- G. 848 cubic inches
- H. 1,679 cubic inches
- J. 1,696 cubic inches



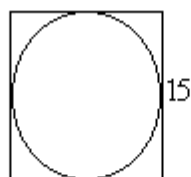
12. Fernando changed the dimensions of a rectangle he had drawn. In the new drawing, each dimension is half as large as in the first drawing. What is the difference between the area of rectangle *A* and the area of rectangle *B*?

- A. 68 square inches
- B. 126 square inches
- C. 136 square inches
- D. 204 square inches



13. Which expression gives the circumference of the circle?

- A.  $15 \times 15$
- B.  $15 \times \pi$
- C.  $2 \times 15 \times 15 \times \pi$
- D.  $15 \times 15 \times \pi$



14. Brian measured the perimeter of his pool using the measure that one of his feet equals 12 inches. He found that the perimeter equaled 140 of his feet. The exact measurement of the pool is 40.5 feet by 30.25 feet. Determine Brian's margin of error.

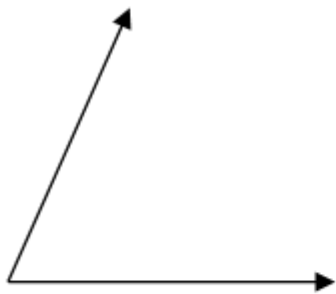
- A. 1.5 ft
- B. 10.5 ft
- C. 18 ft
- D. 120 ft

15. Which unit would you use to measure the mass of a pencil?

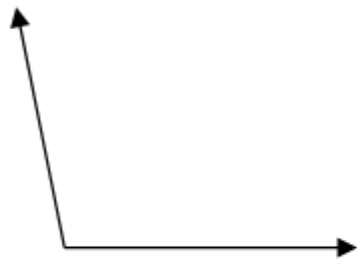
- A. milliliters
- B. grams
- C. kilograms
- D. kilometers

16. Which angle appears to be a right angle?

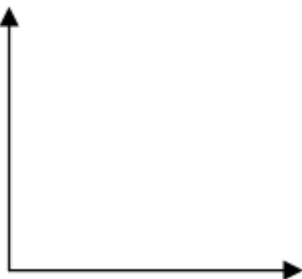
A.



B.



C.



D.



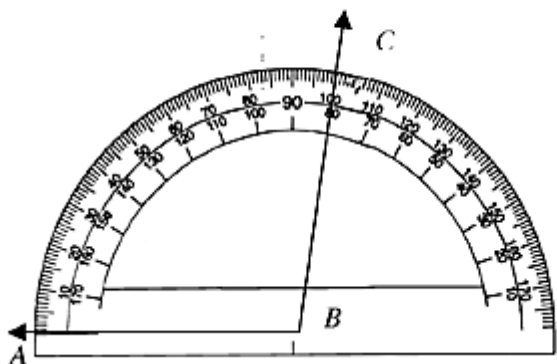
17. What is the measure of angle  $ABC$ ?

A.  $80^\circ$

B.  $100^\circ$

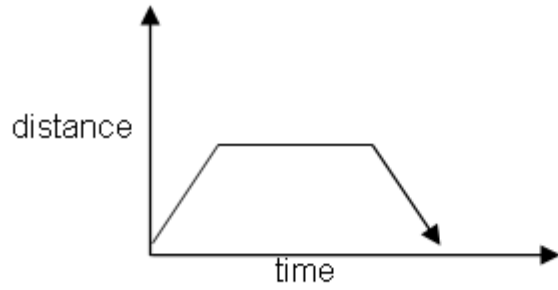
C.  $120^\circ$

D.  $180^\circ$

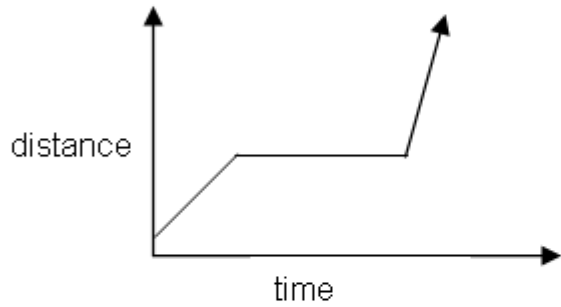


18. A person walks at a rate of 1 foot/second, stops for a while, and then continues again at a rate of 5 feet/second. Which graph best represents this situation?

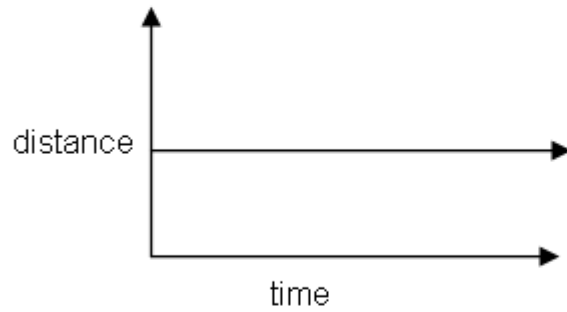
A.



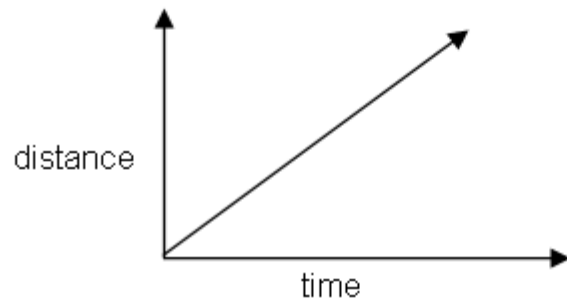
B.



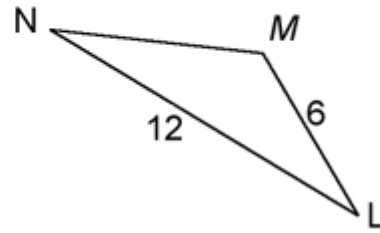
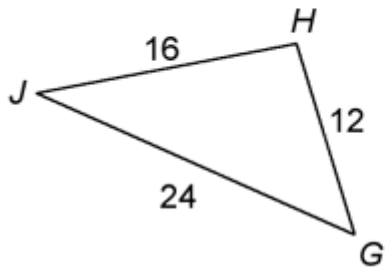
C.



D.



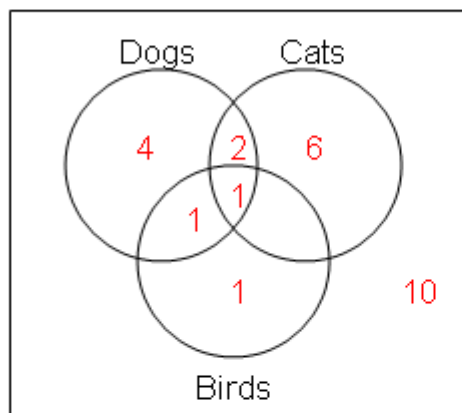
19. The triangles below have the same corresponding angle measures. What is  $MN$ ?



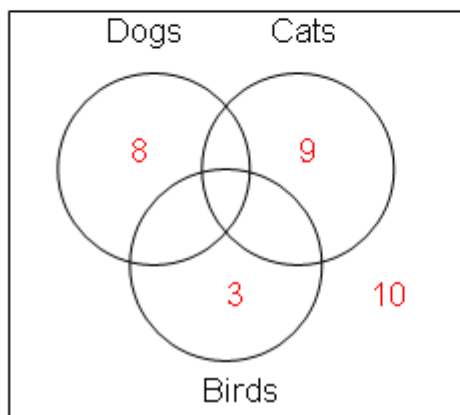
- A. 8
- B. 12
- C. 16
- D. 18

20. Select the Venn diagram that represents this situation. After interviewing 25 of her classmates, Jen found that 8 students owned dogs, 9 owned cats, 3 owned birds, and 10 did not own any of the three animals.

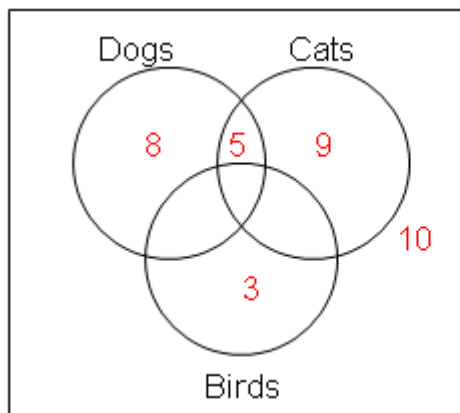
A.



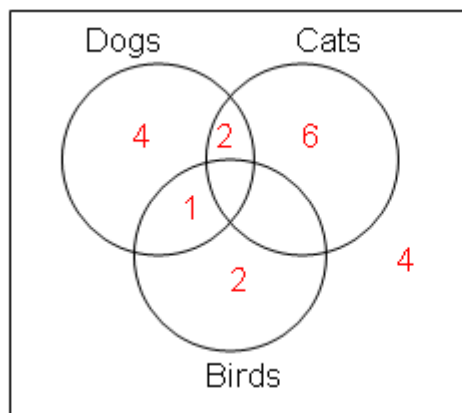
B.



C.



D.



### Answer Key for problems 11-20

11	H
12	D
13	B
14	A
15	B
16	C
17	B
18	B
19	A
20	A