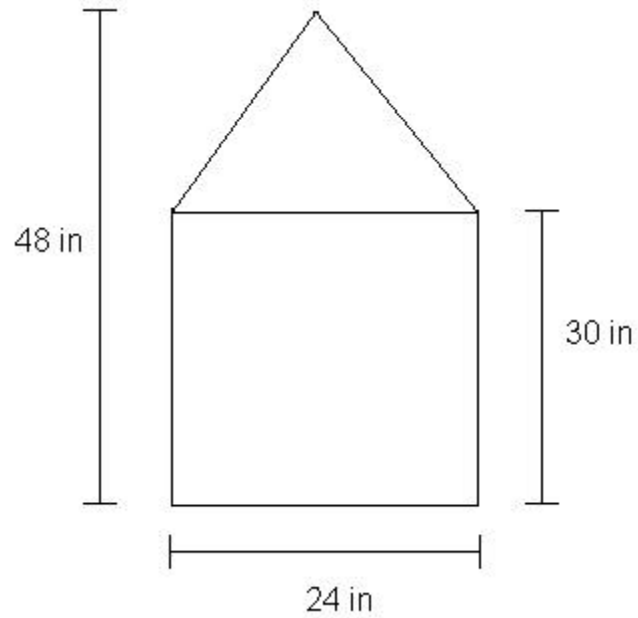


Test #1

1. Find the area of the figure below.

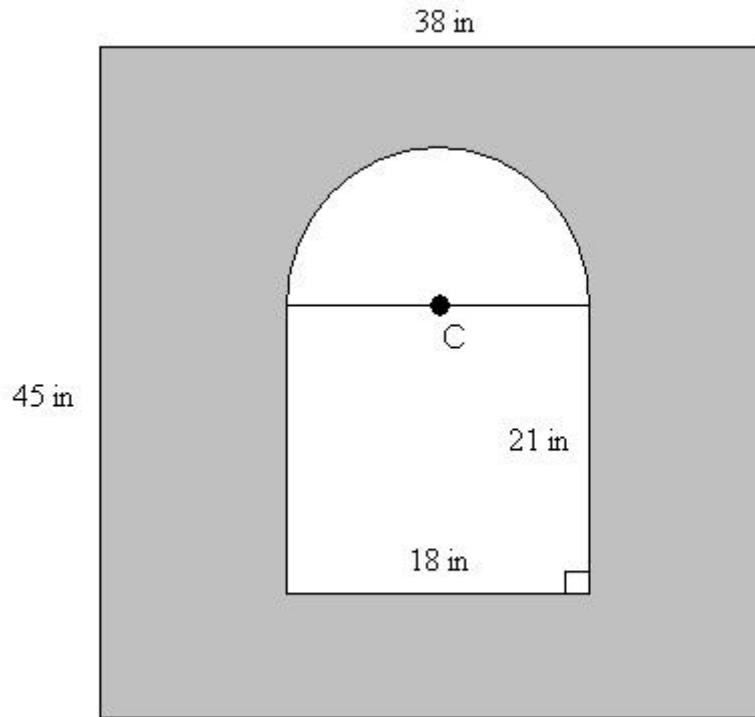
Remember: Area of a square = $b * h$
Area of a triangle = $\frac{1}{2} * b * h$



- a) 936 in^2
- b) 1152 in^2
- c) 720 in^2
- d) 1512 in^2

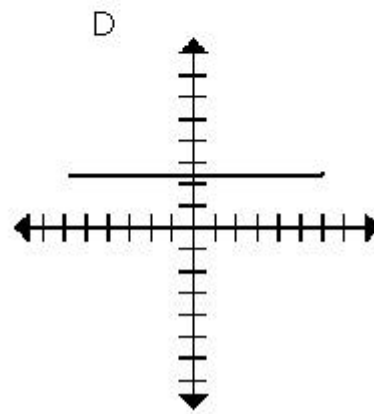
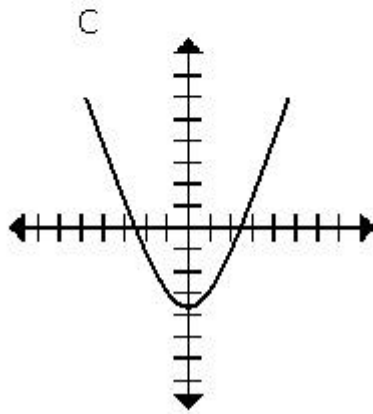
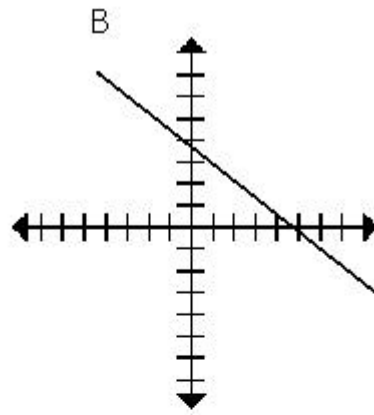
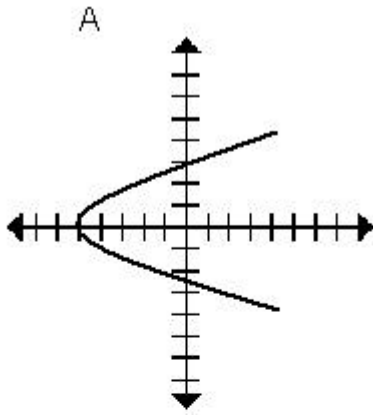
2. Find the approximate area of the shaded region below. Point C represents the center of the circle.

Remember: Area of a square = $b * h$
Area of a circle = $\delta * r^2$
Use $\delta = 3.14$



- a) 1205 in^2
- b) 951 in^2
- c) 823 in^2
- d) 693 in^2

3. Which of the following lines does not represent a function?

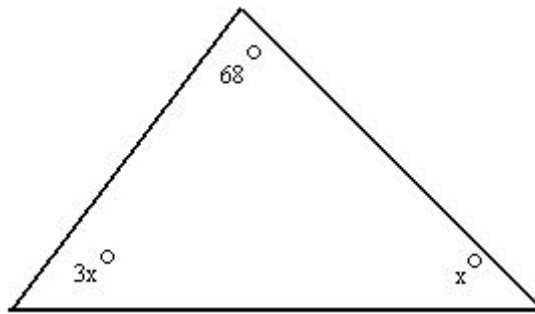


- a) A
b) B
c) C
d) D

4. 40% of what number is 60?

- a) 24
- b) 36
- c) 100
- d) 150

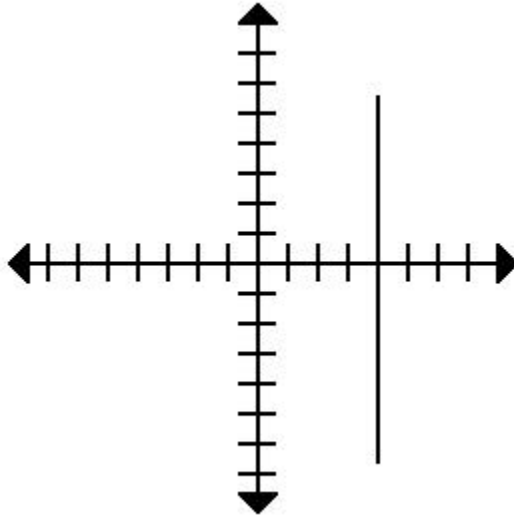
5. Solve for x.



x =

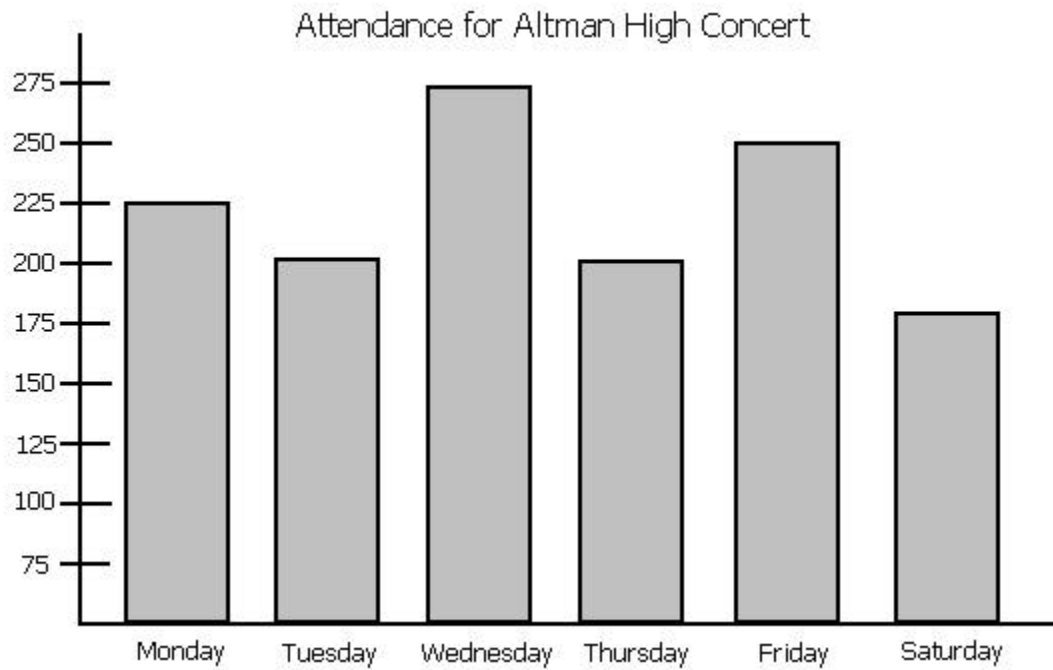
- a) 60°
- b) 45°
- c) 28°
- d) 37°

6. Which of the following linear equations is represented by the line below?



- a) $y = 2x + 4$
- b) $y = 4x$
- c) $x = 4$
- d) $y = 4$

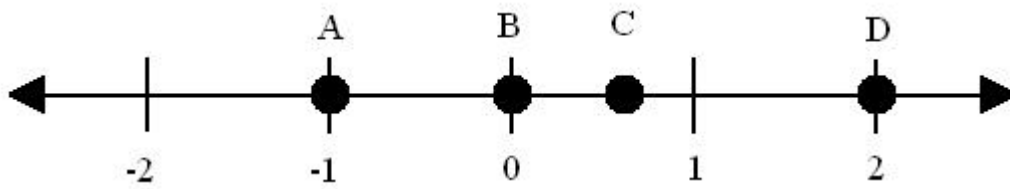
7. The following is a graph depicting the attendance for a concert at Altman High School. Use these attendance figures to answer the question below.



What was the mean attendance for the concert? (Round decimals when appropriate)

- a) 200
- b) 213
- c) 226
- d) 221

8. On the number line below indicate the letter that represents the number that when subtracted from itself becomes larger.



- a) A
- b) B
- c) C
- d) D

9. Simplify using the order of operations.

$$5(6 - 2)^2 \div 20 * 4$$

- a) 1
- b) 8
- c) 16
- d) 80

10. Indicate the next number in the pattern below.

64 48 36 27 20.25 _____

- a) 18.75
- b) 16
- c) 14.125
- d) 15.1875

11. Senator Douglas is running for re-election. Pollsters are projecting that 24.5% of the state will vote in the election. What is the least number of votes Senator Douglas will need to win the election (receive more than 50% of the vote) if his state has a population of 15,794,200?

- a) 1,522,910
- b) 2,387,250
- c) 1,934,790
- d) 7,897,100

12. In the number listed below, which number holds the thousands place value?

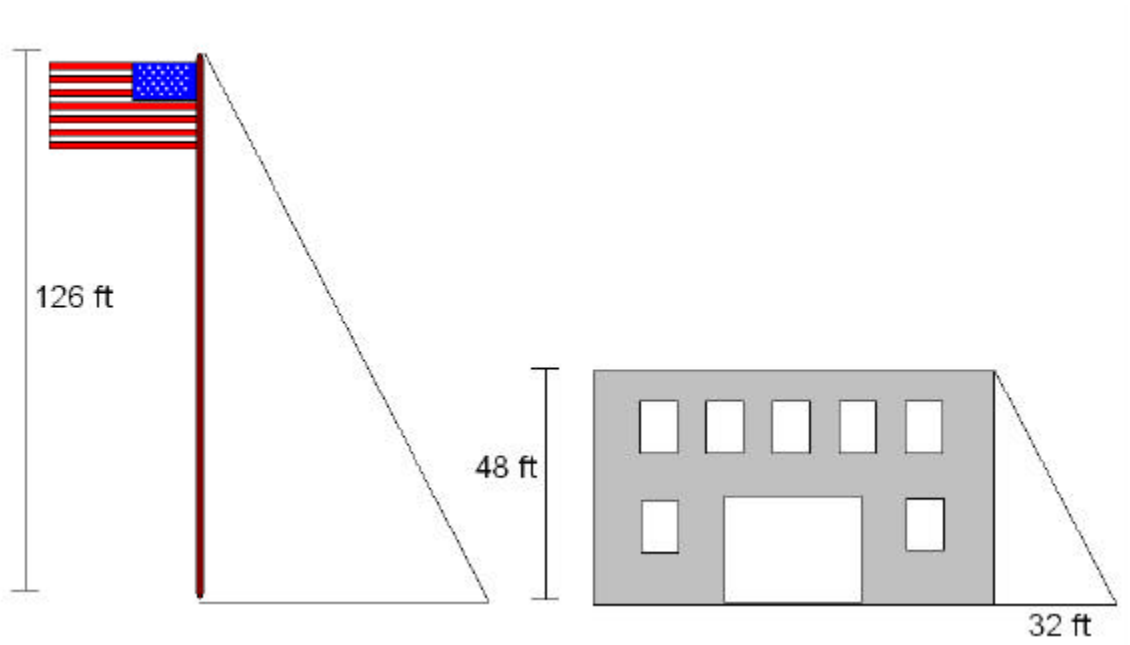
25,794,038,451.021478

- a) 3
- b) 4
- c) 5
- d) 8

13. There are twelve marbles in a canvas bag, 8 blue and 4 red. What is the probability of reaching into the bag and pulling out a blue marble, keeping the blue marble out of the bag, and then pulling out a red marble?

- a) $\frac{2}{9}$
- b) $\frac{1}{4}$
- c) $\frac{8}{33}$
- d) $\frac{3}{7}$

14. A building that measures 48 feet tall casts a shadow 32 feet long. How long of a shadow would a flag cast if it was 126 feet tall?

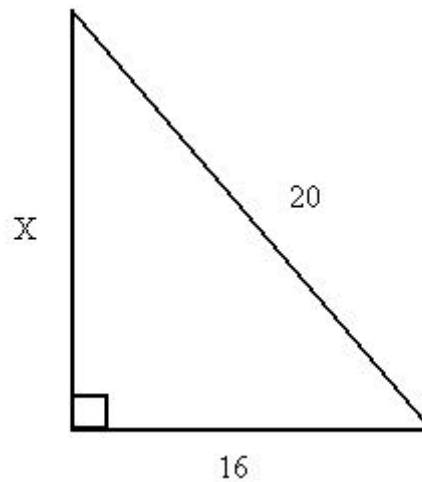


- a) 110 ft
- b) 189 ft
- c) 84 ft
- d) 78 ft

15. Boxing heavyweight champion Johnny “Reck’em” Richmond has won 45 matches, 36 of them by knockout. If he fought and won 60 matches, how many matches should he expect to win by knockout?

- a) 45 knockouts
- b) 51 knockouts
- c) 42 knockouts
- d) 48 knockouts

16. Find x by using the Pythagorean Theorem ($a^2 + b^2 = c^2$)



(illustration not to scale)

- a) 12
- b) 14
- c) 10
- d) 36

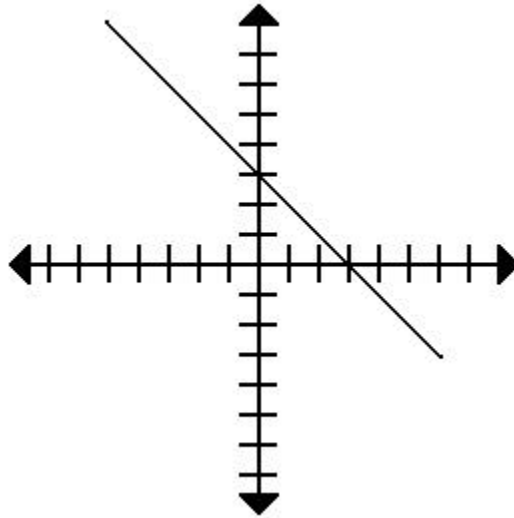
17. Put the number 4986627 in scientific notation.

- a) $4.98 * 10^7$
- b) $4986627 * 10^7$
- c) $4.986627 * 10^6$
- d) $4986627 * 10^{-7}$

18. Put the number $2.35 * 10^{-4}$ in standard form.

- a) 0.000235
- b) 0.03278...
- c) 0.0000235
- d) 2350000

19. Find the slope of the line.



- a) -3
- b) -1
- c) 1
- d) 3

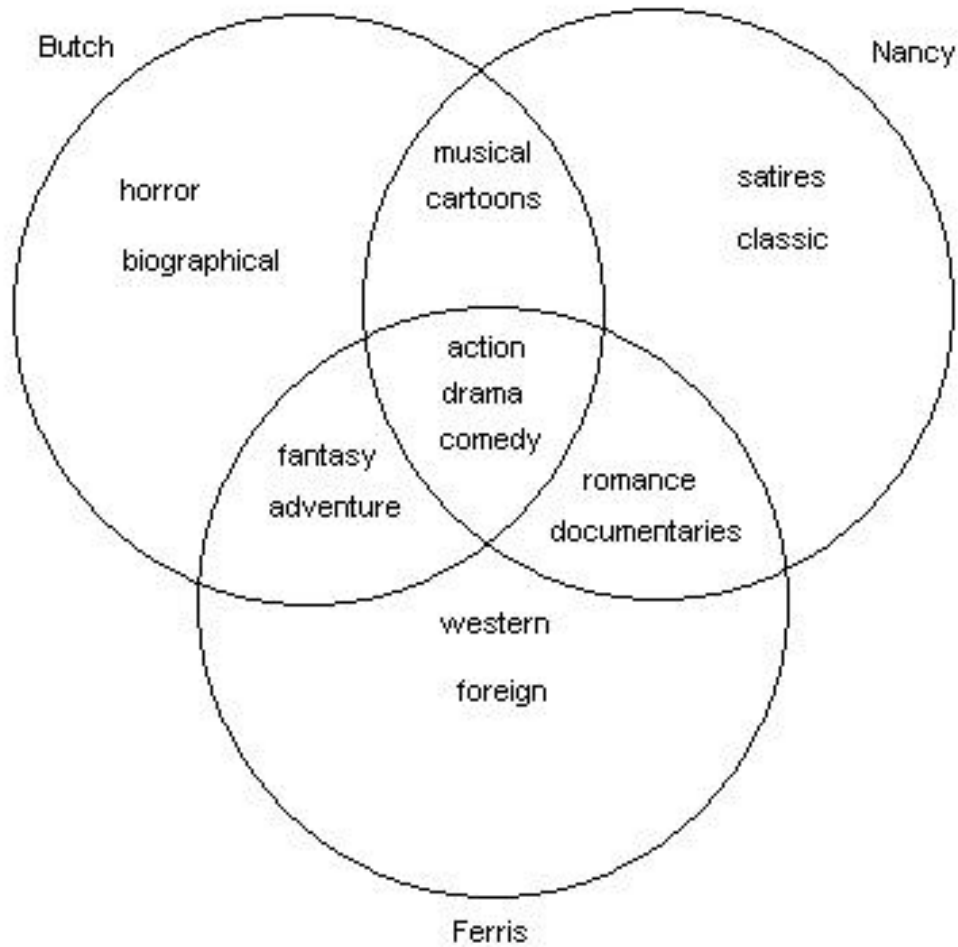
20. Solve for x.

$$3(2x + 4) = 24$$

x =

- a) 8
- b) 4
- c) 2
- d) 1

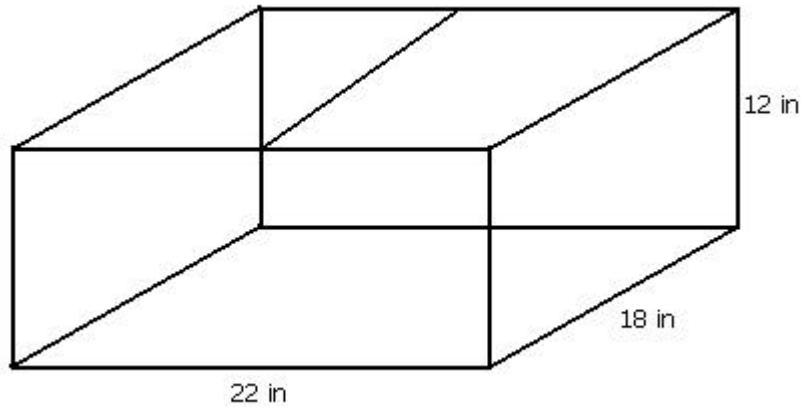
21. Below is a Venn Diagram depicting the movie preferences of three people. Use the diagram to answer the question.



Who would most likely enjoy a movie with both comedy and romance?

- a) Nancy and Butch
- b) only Ferris
- c) Ferris and Nancy
- d) Ferris and Butch

22. Ted is moving and needs to pack away his extensive collection of video cassettes. He has a large box (measurements given below) to put his movies in. Ted discovered that all of his video cassettes measure 7 inches tall by 3.5 inches long by 1 inch wide. What is the most number of video cassettes Ted can fit into the box?



- a) 153 cassettes
- b) 161 cassettes
- c) 193 cassettes
- d) 1572 cassettes