SAT MATH PRACTICE PAPER

Three vases each contain 12 flowers. Some flowers are to be removed from one vase and placed in another vase to make the ratio of flowers in the three vases 3:2:1. What is the least number of flowers that must moved to accomplish this?

○ 18

○ 12

○ 4

○ 8

○ 6

If -1 < x < 0, which of the following statements must be true?
A. $x < x^2 < x^3$
B. $x < x^3 < x^2$
C. $x^2 < x < x^3$
D. $x^2 < x^3 < x$
E. $x^3 < x < x^2$

○ A

○ B

○ C

○ D

○ E

For how many values of n where n is a positive integer less than 10 is (n+1)/2 an integer?

○ None

○ One

○ Six

○ Four

○ Five

If $y = kx$, which of the following is equal to ky?
A. y/x

B. x/y
C. kx^2
D. ky^2
E. k^2x

○ A

○ B

○ C

○ D

○ E

Which of the following is equivalent to $x^2 < -2x$?

○ x

○ x

○ x x

○ -2 0

○ -2 -1

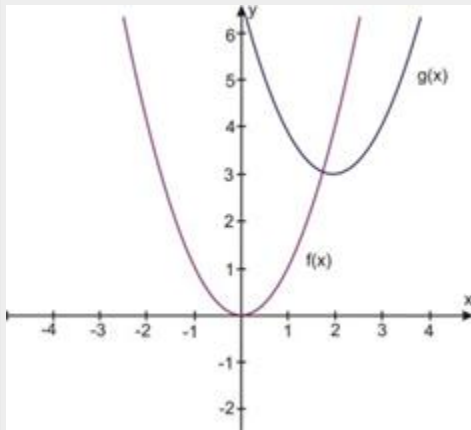Which of the following is equivalent to $x^2 - 1 \geq 8$?

○ $x \geq 3$

○ $x \geq 9$

○ $x \geq -3$ or $x \leq 3$

○ $-3 \leq x \leq 3$

○ $x \leq -3$ or $x \geq 3$

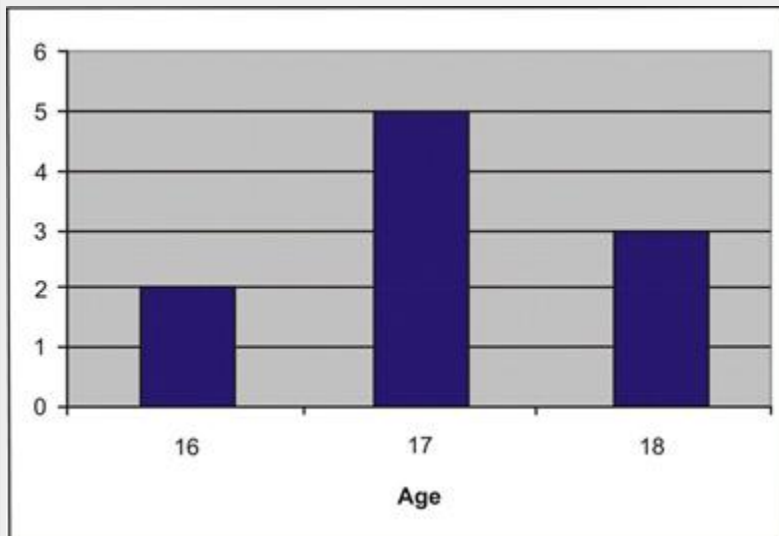If x < -3 and y + 10 = 2x, which of the following must be true?

○ x + 3 > 0

○ y + 10> 0

○ x + y >0

○ x

○ y-16

Which of the following equations defines g(x) in terms of f(x)?

○ g(x) = f(x-2) + 3

○ g(s) = f(x+2) + 3

○ g(x) = f(x-2) - 3

○ g(x) = f(x+2) - 3

○ g(x) = f(x-2)

The following chart gives the graduation ages of 10 students? What is the median age of the graduating students?

- ○ 16
- ○ 16.5
- ○ 17
- ○ 17.5
- ○ 18

Two circles both of radii 6 have exactly one point in common. If A is a point on one circle and B is a point on the other circle, what is the maximum possible length for the line segment AB?

- ○ 12
- ○ 15
- ○ 18
- ○ 20
- ○ 24