Are you ready for ACT math?

Put your skills to the test with these ACT-style questions!

1) Which of the following lines are perpendicular?

    I)   y = ½ x +4

    II) y = 2x + 7

    III) y = -2x + 5

    IV) y = ½ x – 6

  A) I and II

  B) IV and II

  C) I and IV

  D) I and III

  E) II and IV

2) One person can paint a room in 6 hours. Another person can paint a room in 4 hours. How long does it take them to paint it together?

  A) 2.4 hours

  B) 5 hours

  C) 4.9 hours

  D) 10 hours

  E) 3.5 hours

3) Bernadette wants to make a circular garden. She wants it to be able to fit a planter that is 10 feet long through the center, with a 1.5 foot wide path on either side. If she assumes the bottom left corner of the diagram of her yard (shown to the right) to be the origin of a Cartesian plane, what function models her garden?

  A) $(x - 6.5)^2 + (y - 6.5)^2 = 42.25$

  B) $(x + 6.5)^2 + (y + 6.5)^2 = 42.25$

  C) $(x - 5)^2 + (y + 5)^2 = 25$

  D) $(x - 1.5)^2 + (y - 5)^2 = 25$

  E) $(x - 5)^2 + (y - 5)^2 = 25$

Planter