OPMT 5701   Pre–Calculus Review

Name_____

No Calculators are Permitted

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

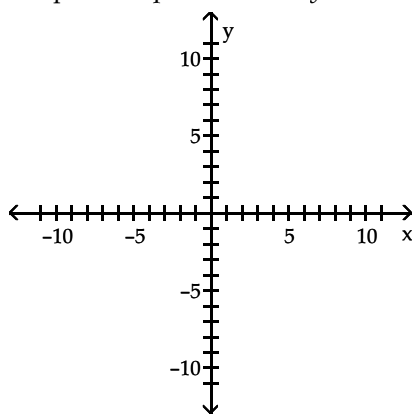1) Completely factor: $3ax + 9ay$ 1) _____

2) Completely factor: $x^2 - 36$ 2) _____

3) Completely factor: $x^2 + 4x + 3$ 3) _____

4) Completely factor: $x^{7/5}y^3 - 35x^{2/5}y^4$ 4) _____

5) Graph the equation $3x + 4y - 12 = 0$.   5)

6) Find the slope–intercept form of an equation of the line that passes through the point (2, 0)   6) _____
   and has slope 4.

7) Find a general linear equation of the line that passes through the points (–2, 5) and (5, 2).   7) _____

8) Find the value and simplify: $9^{3/2}$ 8) _____

9) Find the value and simplify: $(3^4)^{3/4}$ 9) _____

10) Find the value and simplify: $\left(\dfrac{25}{4}\right)^{-1/2}$ 10) _____
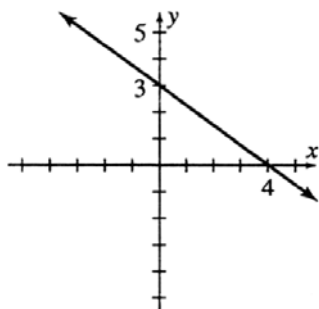
1) $3a(x + 3y)$
2) $(x + 6)(x - 6)$
3) $(x + 1)(x + 3)$
4) $x^{2/5}y^3(x - 35y)$
5)

6) $y = 4x - 8$
7) $3x + 7y - 29 = 0$
8) 27
9) 27
10) $\dfrac{2}{5}$