Unit 4 day 4 notes

Name_____
Date_____Period_____

Expand:

$(x - i)(x + i)$

$(x + 4i)(x - 4i)$

What happens to the complex numbers?

Factoring:

$x^2 + 4$

$x^2 - 4$

$x^2 + 9$

$x^2 - 9$

$16x^2 + 25$

$16x^2 - 25$

Your turn! (factor):

$x^2 + 25$

$36x^2 + 49$

Solve for x:

1. $x^2 = 9$

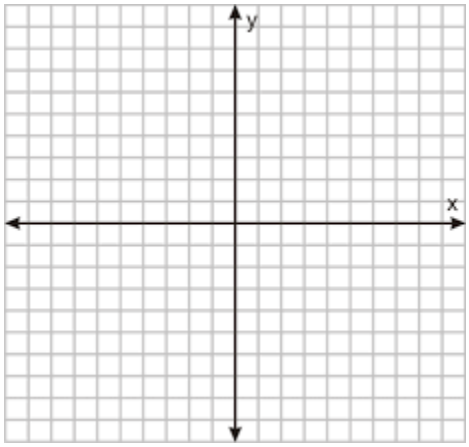
2. $3x^2 - 4 = 20$

3. $\frac{2}{3}x^2 - 4 = 12$

4. $(x + 1)^2 - 16 = 0$

5. $(3x + 2)^2 - 49 = 0$

6. $3(x - 3)^2 + 2 = 26$

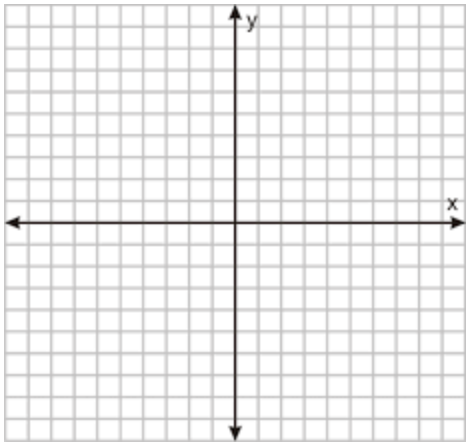


Graph: $y = 4x^2 + x - 3$

Write in intercept form:

x-intercept(s):

y-intercept:

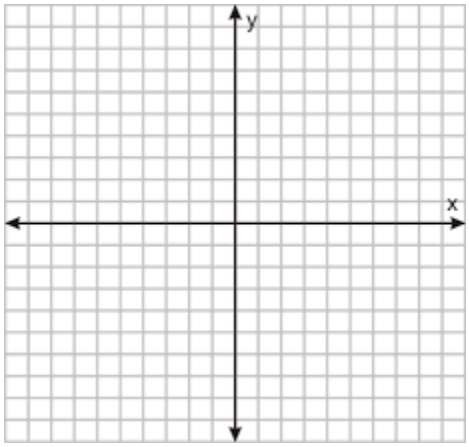


Graph: $y = 2x^2 - 4x - 6$

Write in intercept form:

x-intercept(s):

y-intercept:

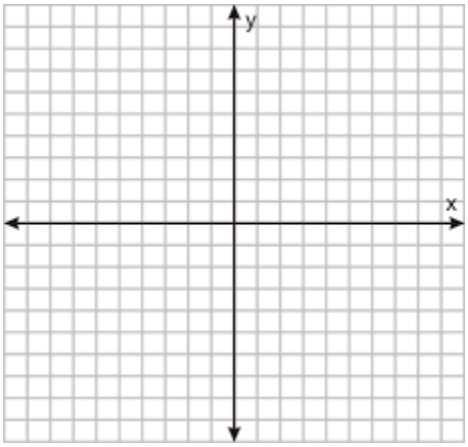


Graph: $y = x^2 + 4$

Write in intercept form:

x-intercept(s):

y-intercept:

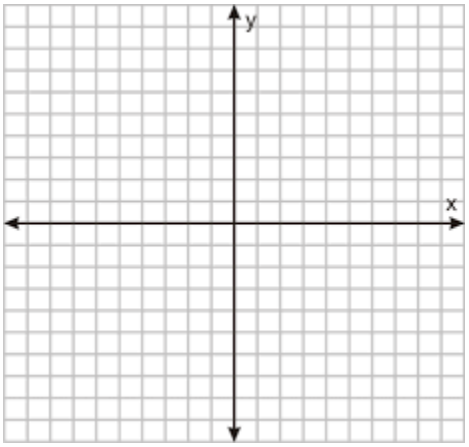


Graph: $y = -(x - 1)^2 + 5$

x-intercept(s):

y-intercept:

Graph: $y = 2(x - 4)^2 - 10$



Graph: $y = 2(x - 4)^2 - 10$

x-intercept(s):

y-intercept: