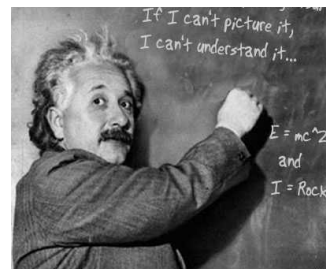


Ready, Set, Go!

Ready

Topic: Standard form or Quadratic form

In each of the quadratic equations, $ax^2 + bx + c = 0$ identify the values of a, b and c.



1. $x^2 + 3x + 2 = 0$ 2. $2x^2 + 3x + 1 = 0$ 3. $x^2 - 4x - 12 = 0$

Write each of the quadratic expressions in factored form.

4. $x^2 + 3x + 2$ 5. $2x^2 + 3x + 1$ 6. $x^2 - 4x - 12$
7. $x^2 - 3x + 2$ 8. $x^2 - 5x - 6$ 9. $x^2 - 4x + 4$
10. $x^2 + 8x - 20$ 11. $x^2 + x - 12$ 12. $x^2 - 7x + 12$

Set

Topic: Radical notation and rational exponents

Each of the expressions below can be written using either radical notation, $\sqrt[n]{a^m}$ or rational exponents $a^{\frac{m}{n}}$. Rewrite each of the given expressions in the form that is missing. Express in most simplified form.

	Exponential Form	Radical Form
13.	$\sqrt[3]{5^2}$	



	Exponential Form	Radical Form
14.		$16^{\frac{3}{4}}$
15.	$\sqrt[3]{5^7 \cdot 3^5}$	
16.		$9^{\frac{2}{3}} \cdot 9^{\frac{4}{3}}$
17.	$\sqrt[5]{x^{13}y^{21}}$	
18.	$\sqrt[3]{27a^5b^2}$	
19.	$\sqrt[5]{\frac{32x^{13}}{243y^{15}}}$	
20.		$9^{\frac{3}{2}}s^{\frac{6}{3}}t^{\frac{1}{2}}$

Solve the equations below, use radicals or rational exponents as needed.

21.

$$(x + 5)^4 = 81$$

22.

$$2(x - 7)^5 + 3 = 67$$



Go

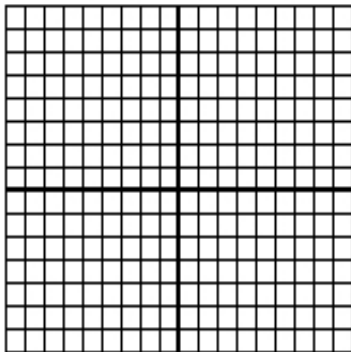
Topic: x-intercepts and y-intercepts for linear, exponential and quadratic

Given the function, find the x-intercept (s) and y-intercept if they exist and then use them to graph a sketch of the function.

23. $f(x) = (x+5)(x-4)$

x-intercept(s)

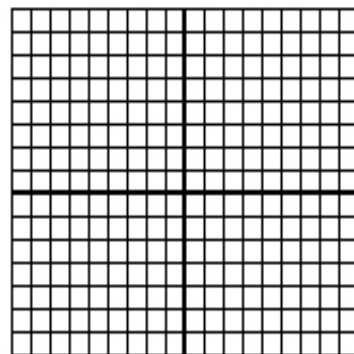
y-intercept



24. $g(x) = 5(2^{x-1})$

x-intercept(s)

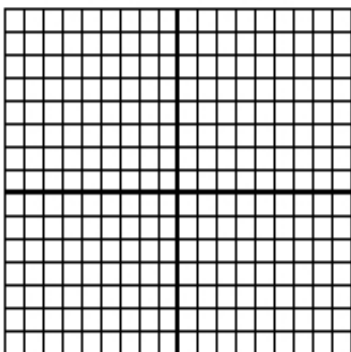
y-intercept



25. $h(x) = -2(x+3)$

x-intercept(s)

y-intercept



26. $k(x) = x^2 - 4$

x-intercept(s)

y-intercept

