

Converting Between Forms Name: _____

Find the factored form, vertex form, and standard form of each quadratic!

Enter your matches here:

Set A

Set B

Set C

Set D

Set E

Set F

Set G

Set H

A. $f(x) = x^2 - 2x - 3$

I. $f(x) = -2(x+5)(x+9)$

J. $f(x) = 3(x+4)^2 - 12$

B. $f(x) = 3x^2 + 24x + 36$

2. $f(x) = (x+2)(x-4)$

K. $f(x) = -3(x+8)^2 + 48$

C. $f(x) = -3x^2 + 42x - 144$

3. $f(x) = -3(x+4)(x+12)$

L. $f(x) = -2(x+7)^2 + 8$

D. $f(x) = -2x^2 - 28x - 90$

4. $f(x) = -3(x-8)(x-6)$

M. $f(x) = (x-1)^2 - 9$

E. $f(x) = x^2 - 2x - 8$

5. $f(x) = -2(x+15)(x+3)$

N. $f(x) = -2(x+9)^2 + 72$

F. $f(x) = x^2 + 8x + 12$

6. $f(x) = (x+1)(x-3)$

O. $f(x) = (x-1)^2 - 4$

G. $f(x) = -2x^2 - 36x - 90$

7. $f(x) = (x+2)(x+6)$

P. $f(x) = -3(x-7)^2 + 3$

H. $f(x) = -3x^2 - 48x - 144$

8. $f(x) = 3(x+2)(x+6)$

Q. $f(x) = (x+4)^2 - 4$

Converting Between Forms: Answer Key

Find the factored form, vertex form, and standard form of each quadratic!

Key	Standard Form	Factored Form	Vertex Form
A, 6, 😊	A. $f(x) = x^2 - 2x - 3$	6. $f(x) = (x+1)(x-3)$	😊 $f(x) = (x-1)^2 - 4$
B, 8, 😊	B. $f(x) = 3x^2 + 24x + 36$	8. $f(x) = 3(x+2)(x+6)$	😊 $f(x) = 3(x+4)^2 - 12$
C, 4, 😊	C. $f(x) = -3x^2 + 42x - 144$	4. $f(x) = -3(x-8)(x-6)$	😊 $f(x) = -3(x-7)^2 + 3$
D, 1, 😊	D. $f(x) = -2x^2 - 28x - 90$	1. $f(x) = -2(x+5)(x+9)$	😊 $f(x) = -2(x+7)^2 + 8$
E, 2, 😊	E. $f(x) = x^2 - 2x - 8$	2. $f(x) = (x+2)(x-4)$	😊 $f(x) = (x-1)^2 - 9$
F, 7, 😊	F. $f(x) = x^2 + 8x + 12$	7. $f(x) = (x+2)(x+6)$	😊 $f(x) = (x+4)^2 - 4$
G, 5, 😊	G. $f(x) = -2x^2 - 36x - 90$	5. $f(x) = -2(x+15)(x+3)$	😊 $f(x) = -2(x+9)^2 + 72$
H, 3, 😊	H. $f(x) = -3x^2 - 48x - 144$	3. $f(x) = -3(x+4)(x+12)$	😊 $f(x) = -3(x+8)^2 + 48$