**System Of Equations**

1. Solve each system algebraically by substitution or elimination.

1. $2x^{2}-2x-2y=12$ (b) $y=2x^{2}-6x+3$

 $2x-y=2$ $y=-x^{2}+6x-6$

(c) $y=7x-11$ (d) $3y-12x^{2}-24x=12$

 $5x^{2}-3x-y=6$ $y=3x^{2}-2x-5$

2. The difference between two integers is 12. The square of the larger integer, minus 30

 times the second integer, is equal to 360.

1. Write a system of equations to model the problem.

(b) Solve your system to find the possible integers.

Answer key

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| 1. (a) (-1, -4) and (4, 6) (b) (1, -1) and (3, 3)  | (c) (1, -4) (d) (-1, 0) and (-9, 256) |
| 2. 30 and 18 |  |