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**8-17.** Use the process you developed in class to factor the following quadratics.

* 1. *x*2 − 4*x* – 12 b. 4*x*2 + 4*x* + 1

 c. 2*x*2 − 9*x* – 5 d. 3*x*2 + 10*x* − 8

**8-18.** For each rule represented below, state the *x*- and *y*-intercepts, if possible.   To what function family do each of the graphs belong?

a.  b. 

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| X | −5 | −4 | −3 | −2 | −1 | 0 | 1 | 2 |
| *y* | 8 | 4 | 0 | −4 | 0 | 2 | 0 | −4 |

c. 5*x* − 2*y* = 40 d.

**8-21.** Find the point of intersection for each system.

* 1. *y* = 2*x* – 3 b. 3*x* = *y* − 2
	*x* + *y* = 15 6*x* = 4 − 2*y*

**8-22.** Solve each equation below for the given variable, if possible.

a.  b. −3(2*b −* 7) = −3*b* + 21 − 3*b* c. 6 − 2(*c −* 3) = 12

**8-23.** Find the equation of the line that passes through the points (−800, 200) and (−400, 300).