## Why Did the Plum Divorce the Grape?

Graph each inequality. Under each grid are true-or-false statements describing the location of solutions. Circle the number-letter pair next to each TRUE statement. For these pairs, write the letter in the matching numbered box at the bottom of the page.


1. $y \geq \frac{2}{3} x+1$

2. A Includes boundary line.
2.H Solutions in quadrant 1.
26.I Solutions in quadrant 2.
12.E Solutions in quadrant 3.
28.D Solutions in quadrant 4.
3. $y>2 x-3$

20.L Includes boundary line.
28.S Solutions in quadrant 1. 10.I Solutions in quadrant 2.
6.A Solutions in quadrant 3.
4. N Solutions in quadrant 4.
5. $y \leq-\frac{1}{4} x-1$

15.0 Includes boundary line.
1.T Solutions in quadrant 1.
7.S Solutions in quadrant 2.
20.I Solutions in quadrant 3.
3.E Solutions in quadrant 4.


|  |  |  |  | $y$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | - |  | - |  |  |  |  |  | $x$ |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

5.H Includes boundary line.
13.D Solutions in quadrant 1.
18. T Solutions in quadrant 2.
1.S Solutions in quadrant 3.
22.I Solutions in quadrant 4.
5. $y>-\frac{4}{3} x+1$

|  |  |  |  | $\boldsymbol{Y}$ P |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

24.G Includes boundary line.
16.F Solutions in quadrant 1.
5.W Solutions in quadrant 2.
17.S Solutions in quadrant 3.

9-T Solutions in quadrant 4.
6. $y \leq-x+3$

25.K Includes boundary line.
11.R Solutions in quadrant 1.
27.D Solutions in quadrant 2.
18. $\mathbf{R}$ Solutions in quadrant 3.
$21 . S$ Solutions in quadrant 4.

