

Name _____

Date _____

LESSON
3.4**Practice***For use with pages 177–185***Tell whether the given ordered triple is a solution of the system.**

1. $(2, 1, 3)$

$2x - y + 5z = 16$

$x - 3y + 2z = 5$

$x + 2y + z = 7$

2. $(5, -2, 2)$

$2x - y + z = 5$

$x + 2y - z = -1$

$-2x + y - 3z = -15$

3. $(3, 3, 4)$

$x + 2y - 2z = 1$

$7x - 4y + z = 11$

$2x - 3y + 2z = 5$

4. $(1, -1, 3)$

$4x + 2y + 3z = 11$

$x - 2y + z = 6$

$2x + y + 2z = 7$

5. $(0, 0, 2)$

$2x - 4y - 2z = -4$

$2x + 5y + 8z = 16$

$6x - 3y - z = 2$

6. $(5, -2, 3)$

$3x + 4y - 2z = 1$

$2x + 3y - z = 1$

$4x + 8y - z = 1$

Solve the system using any algebraic method.

7. $x + y - 5z = -5$

$y - 2z = 14$

$4y - 2z = 8$

8. $x - y + z = 5$

$2y + 3z = 14$

$-3y + 2z = 5$

9. $-3x + y - z = -2$

$2x - y - 2z = -12$

$4x + 2y + z = 1$

10. $x - 2y + z = -1$

$x + 2y - z = 7$

$x + y + z = 2$

11. $x - 2y + 4z = -19$

$2x + y - 3z = 14$

$3x + y + 2z = 5$

12. $x - 2y - 3z = -7$

$4x + 5y - 2z = -7$

$-2x + y + z = -7$

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LESSON
3.4**Practice** *continued**For use with pages 177–185*

13. $8x - 2y + z = -6$
 $-x + 3y - 2z = -15$
 $3x - y + 4z = 13$
14. $2x + 2y + z = -5$
 $2x + y + 3z = 7$
 $-4x - 2y - 6z = -14$
15. $3x - 4y - 4z = 8$
 $4x + 2y - 2z = 11$
 $-5x + 8y + 3z = -9$

16. **Harvest Yields** A farmer makes three deliveries to the feed mill during one harvest. The harvest produced 2885 bushels of corn, 1335 bushels of wheat, and 1230 bushels of soybeans. Use the table to write and solve a system of equations to find the total number of bushels in each delivery.

Crop	1st Delivery	2nd Delivery	3rd Delivery
Corn	50%	75%	40%
Wheat	30%	10%	30%
Soybeans	20%	15%	30%

17. **Harvest Earnings** The feed mill pays a farmer \$6930.00 for the 1st delivery, \$5475.00 for the 2nd delivery, and \$8879.50 for the 3rd delivery. The table shows the number of bushels included in each delivery. Use the table to write and solve a system of equations to find the price per bushel that the farmer received for each crop.

Delivery	Corn	Wheat	Soybeans
1st Delivery	900	540	360
2nd Delivery	1125	150	225
3rd Delivery	860	645	645