

The sum of a certain number and a second number is -42.

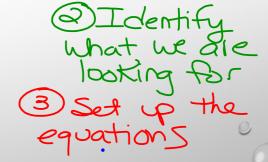
The first number minus the second is 52. Find the numbers.

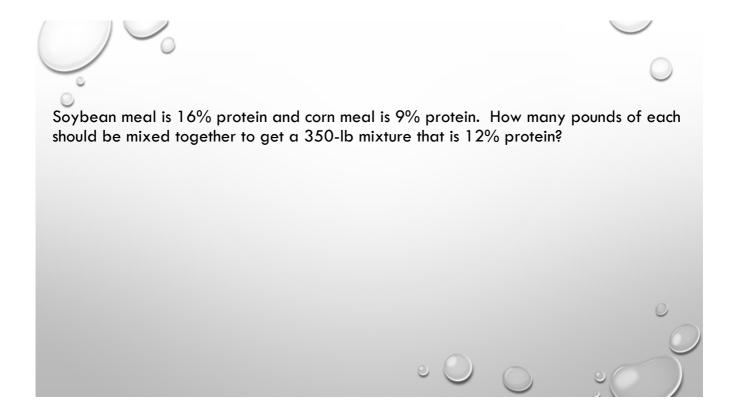
$$X + y = -42$$

 $X - y = 52$

$$(X=5)$$
 $(X=5)$
 $(X=-42)$
 $(Y=-47)$

ORead



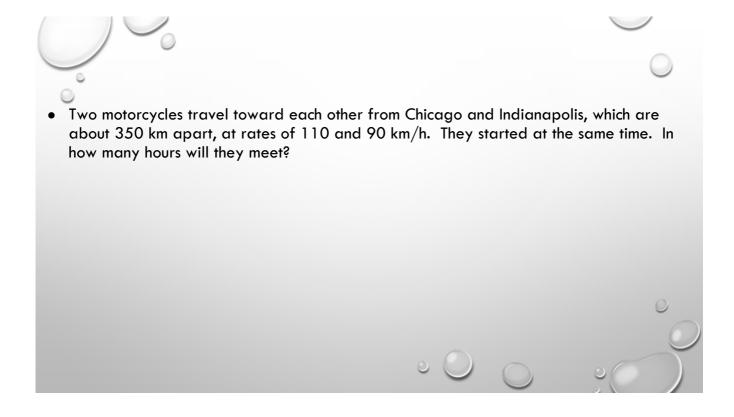


X-2 5-2 = 3 hous

A train leaves a station and travels north at 75 MPH. Two hours later a second train leaves on a parallel track and travels north at 125 MPH. How long will it be before the 2nd train passes the first train? Time.

Train 2 | 125 |
$$\times$$
 2 | \times 4 | \times 125 | \times 2 | \times 2 | \times 125 | \times 2 | \times 3 | \times 3 | \times 4 | \times 5 | \times 5 | \times 5 | \times 5 | \times 6 | \times 6 | \times 7 |

4



Carlos is 8 years older than his sister Maria. Four years ago Maria was two-thirds as old as Carlos. How old are they now?

$$X = Carlos ' age now$$

$$Y = Maria's age now$$

$$X = 8 + 4$$

$$Y - 4 = \frac{2}{3}(x - 4)$$

$$Y - 4 = \frac{2}{3}(x - 4)$$

$$(y - 4 - \frac{2}{3}y + \frac{8}{3})^{3}$$

$$3y - 12 = 2y + 8$$

$$-2y$$

$$y - 43 = 8$$

$$+12$$

$$y = 30$$

The sum of the digits of a two-digit number is 5. If the digits are reversed, the new number is 27 more than the original number. Find the original number.

(a) digits X = 154 digit Y = 244 digit Y = 24