WP-6 Notes

Monday, 2 November 2026 07:38

1) Work Shifts

Find the number of full 8-hour shifts that Jessica worked last month.

(1) She worked twice as many 5-hour shifts as 8-hour shifts.

(2) She worked a total of 288 hours.

= number of

Let x = # 8hr shifts

2x = # 5hr shifts

16 8hr
32 5hr

Shifts x hrs/shift = total

8hr: x	8	8x
5hr: 2x	5	10x

$8x + 10x = 288$

$18x = 288$

$x = 16$

2) Shipment of Boxes

Find the total weight of the boxes of pecans in a shipment of 3 lb boxes of pecans and 2 lb boxes of walnuts.

(1) There were 18 fewer 2 lb boxes of walnuts than 3 lb boxes of pecans.

(2) The total weight of the shipment was 429 lb.

x = boxes of pecans

x - 18 = boxes of walnuts

boxes x wt/box = total

p	x	3	3x
w	x - 18	2	2(x - 18)

$3x + 2(x-18) = 429$

$3x + 2x - 36 = 429$

$+36 \quad +36$

$\frac{5x}{5} = \frac{465}{5}$

$x = 93$

93 boxes of pecans

75 boxes of walnuts