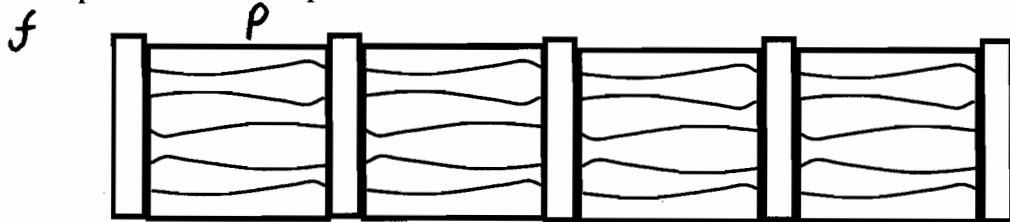## Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

T1

Jon buys fencing for his yard.

He pays $122 for 5 fence posts and 4 fence panels.

f p
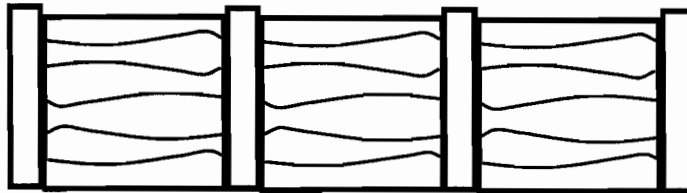

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? $94

Show how you figured it out.

$$5f + 4p = 122 \quad \times 5$$
$$- 21f + 20p = 576$$
$$25f + 20p = 610$$
$$\overline{}$$
$$4f + 0p = 40$$
$$f = 10$$

$40 + 3.18$

$$5 \cdot 10 + 4p = 122$$
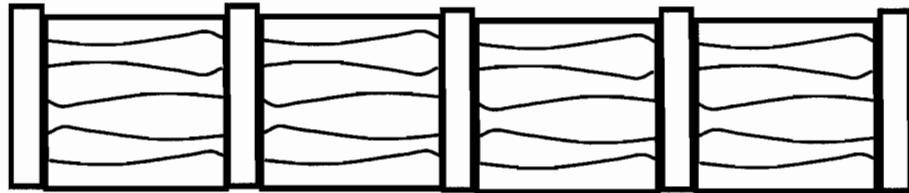$$4p = 122 - 50 = 72 \div 4$$
$$p = 18$$

Fencing

9

Fencing

T2

This problem gives you the chance to:
• interpret given information
• choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
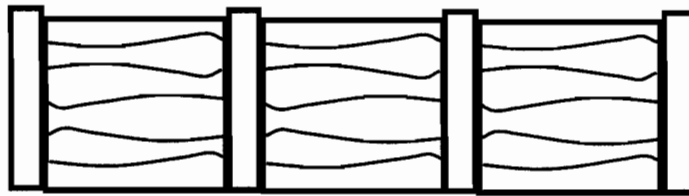
He pays $122 for 5 fence posts and 4 fence panels.

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels?   _112 $_

Show how you figured it out.

$122/2 = 61/5 = 12.2$

$5.12 = 60$ $122 - 60 = 62$ $62/4 = 15.5$ ✗

$5.11 = 55$ $122 - 55 = 67$ $67/4 = 16.75$ ✗

$5.10 = 50$ $122 - 50 = 72$ $72/4 = 18$ ✓

$21.10 + 20.18 = 570$ ✓

$40 + 4.18 = 112$

9

Fencing

Fencing

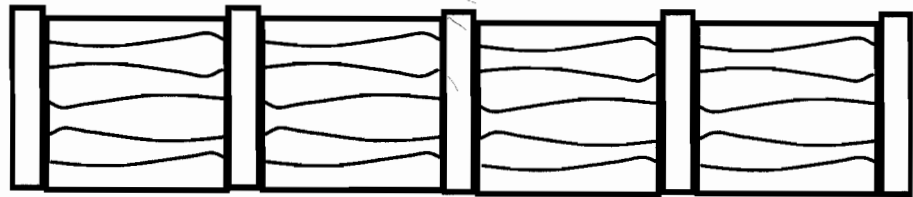This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

T3

Jon buys fencing for his yard.

He pays $122 for 5 fence posts and 4 fence panels.

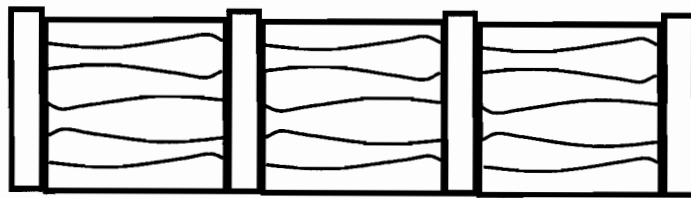*[handwritten]* $5x + 4y = 122$
$5(14) + 4(13) = 122$

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? *[handwritten]* $\underline{94 \$}$

Show how you figured it out.

[handwritten]

$21x + 20y = 570$

$5x + 4y = 122$

$-5x \qquad -5x$

$\dfrac{4y}{4} = \dfrac{122 - 5x}{4}$

$y = 30.5 - \dfrac{5}{4}x$

$21(14) + 20(13) = 554$

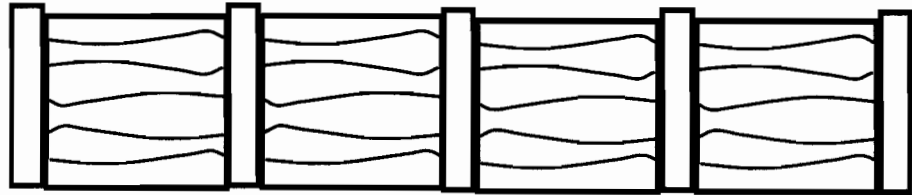$21(10) + 20(18) = 570$

$x = 10$
$y = 18$

Fencing

9

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
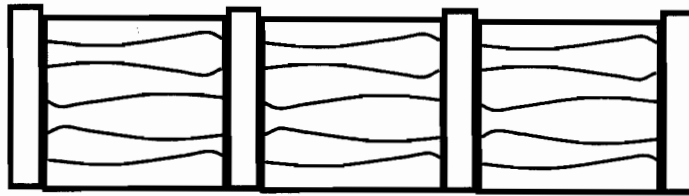
He pays $122 for 5 fence posts and 4 fence panels.

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels?   _____94_____

Show how you figured it out.

13×5

14.25

$21x + 20x = 570$

$5x + 4x = 122$

posts = ~~$16~~ 10

panels = ~~$10.5~~ 18
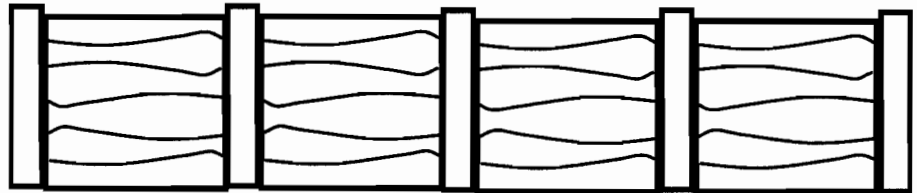
$9x = 122$

posts = 10

panels = 18

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.

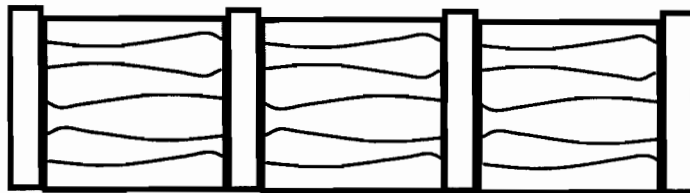He pays \$122 for 5 fence posts and 4 fence panels.

He pays \$570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? $\$40 +\$54 = \$94$

Show how you figured it out.

$10 \cdot 5 = 50$

$\begin{array}{r} 122 \\ - 50 \\ \hline 72 \end{array}$ $\dfrac{72}{4} = 18$

$10 \cdot 4 = 40 + (3 \times 18)$

$10 \times 21 = 210$
$18 \times 20 = 360$
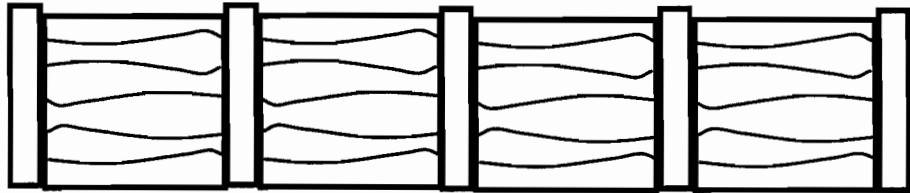$\overline{\$570}$

$40 + 54 = \$94$

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
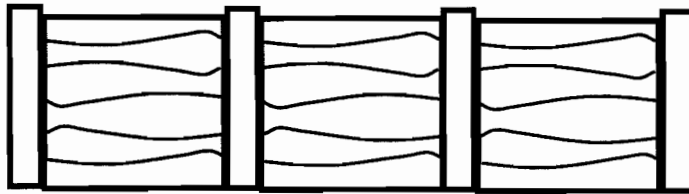
He pays \$122 for 5 fence posts and 4 fence panels.

He pays \$570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels?   ____\$94____

Show how you figured it out.

$$122 = 5x + 4y$$

$$5 \times 10 = 50$$
$$4 \times 18 = +72$$
$$\overline{122}$$

$$570 = 21x + 20y$$

$$21 \times 10 = 210$$
$$20 \times 18 = +360$$
$$\overline{570}$$

$$? = 4x + 3y$$

$$4 \times 10 = 40$$
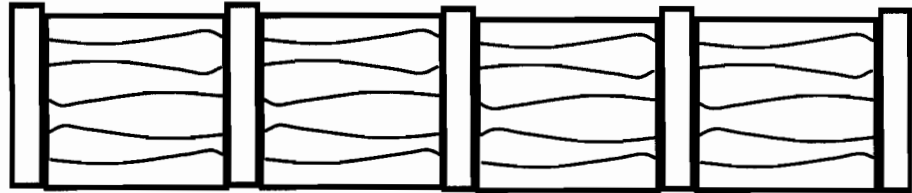$$3 \times 18 = +54$$
$$\overline{94}$$

9

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

S2

Jon buys fencing for his yard.

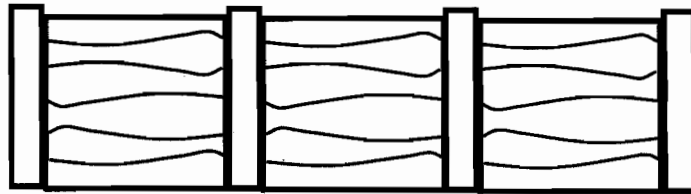He pays $122 for 5 fence posts and 4 fence panels.

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? ___$102___

Show how you figured it out.

$$122 = 5x + 4y \xrightarrow{\cdot 5} 610 = 25x + 20y$$
$$570 = 21x + 20y \longrightarrow 570 = 21x + 20y \ -$$
$$\overline{\quad\quad 40 = 4x \quad\quad}$$
$$10 = x$$
$$122 = 50 + 4y$$
$$4y = 72$$
$$y = 18$$
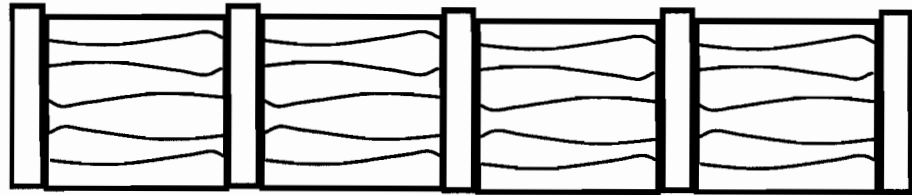
$$4 \cdot 18 + 3 \cdot 10 = 102$$

9

Fencing

Fencing

This problem gives you the chance to:
• interpret given information
• choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.

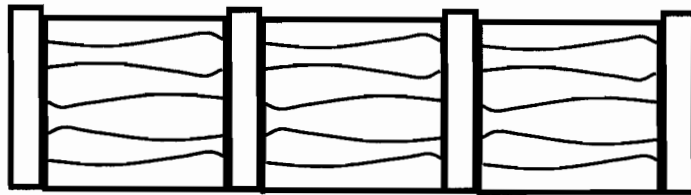He pays \$122 for 5 fence posts and 4 fence panels.

He pays \$570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels?   _____94 \$_____

Show how you figured it out.
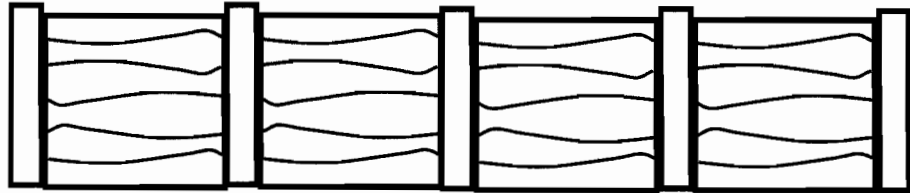
$$5x + 4y = 122$$

I tried it on my calculator!

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
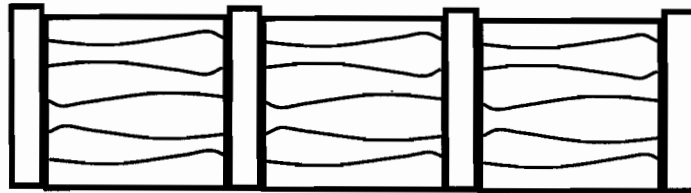
He pays $122 for 5 fence posts and 4 fence panels.

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? $\underline{\$\ 94}$

Show how you figured it out.

$8 \cdot 5 = 40$ $122 - 82/4$

$4 \cdot 5 = 45$ $122 = 77/4$

$4 \cdot 5 = 45$ $122 - 50 = 72/4 = 18$

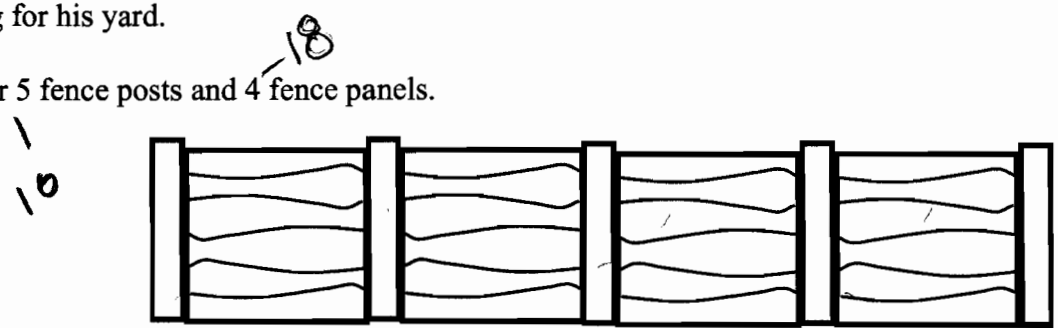$10 \cdot 5 = 50$

$4 \cdot 10 + 3 \cdot 18$

Fencing

9

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
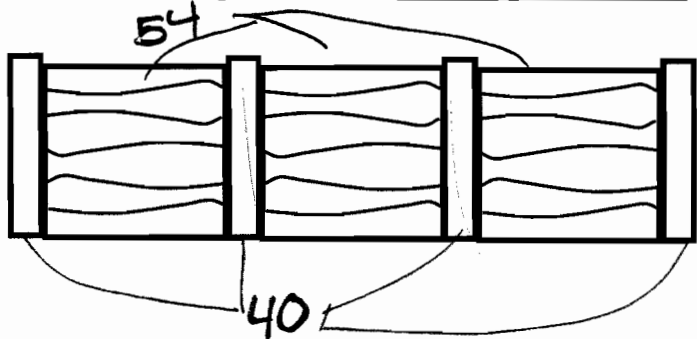
He pays $122 for 5 fence posts and 4 fence panels.

-18

1
10

210

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels?

$94

Show how you figured it out.

54

40

EACH panel is 18$

each pole is 10$

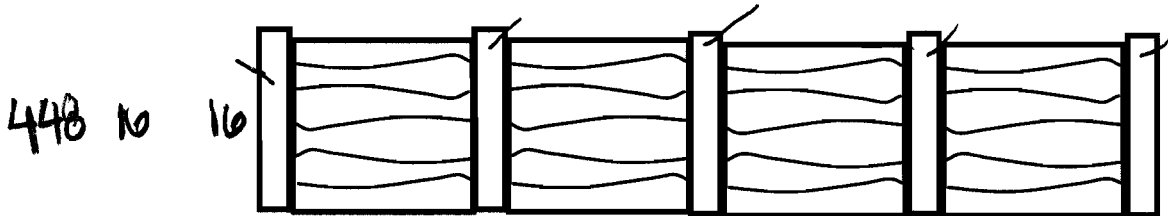$$\begin{array}{r} 54 \\ +40 \\ \hline 94 \end{array}$$

9

Fencing

Fencing

This problem gives you the chance to:
• interpret given information
• choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
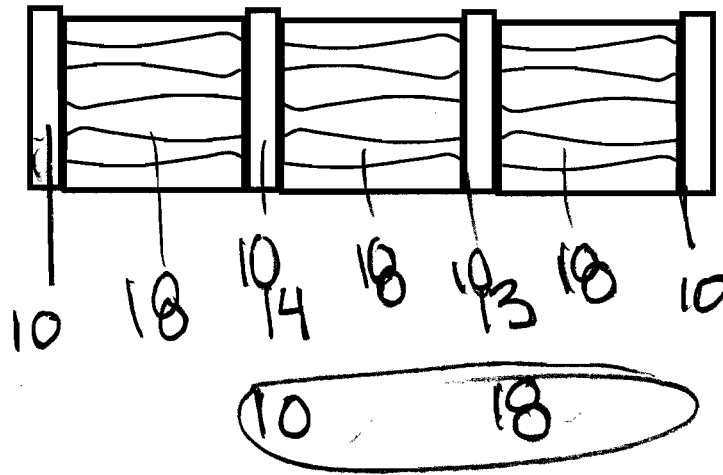
He pays $122 for 5 fence posts and 4 fence panels.

448 ᴎo 16

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? ___$94___

Show how you figured it out.

10   18   14   18   13   18   10

(10   18)

$$5p + 4a = 122$$
$$-4a \quad -4a$$
$$\frac{5p}{5} = \frac{122 - 49}{5}$$
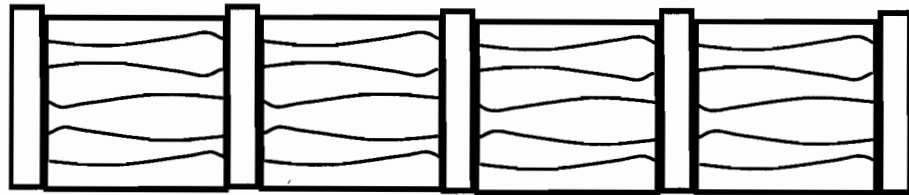$$p = 24.4 - \tfrac{4}{5}a$$

Fencing

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.

He pays \$122 for 5 fence^x posts and 4 fence^y panels.

He pays \$570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? $\underline{\$94}$

Show how you figured it out. $4 \cdot 10 + 3 \cdot 18$

$$5x + 4y = 122$$
$$21x + 20y = 570$$
$$- 5x + 4y = 122$$
$$\overline{}$$
$$16x + 16y = 448$$
$$- 5x + 4y = 122$$
$$\overline{}$$
$$11x + 12y = 326 $$
$$- 5x + 4y = 122$$
$$\overline{}$$
$$6x + 8y = 204$$
$$- 5x + 4y = 122$$
$$\overline{}$$
$$1x + 4y = 82$$

$$1x + 4y = 82$$
$$- 5x + 4y = 122$$
$$\overline{}$$
$$-4x = -48$$
$$x = 10$$

$$50 + 4y = 122$$
$$4y = 72$$
$$y = 18$$

9

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
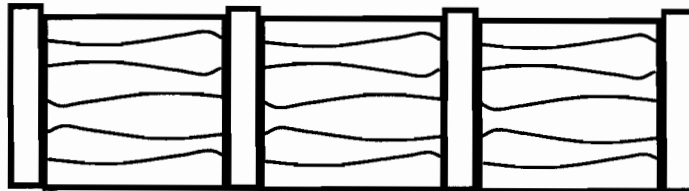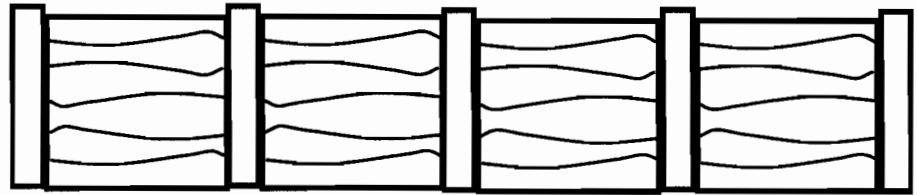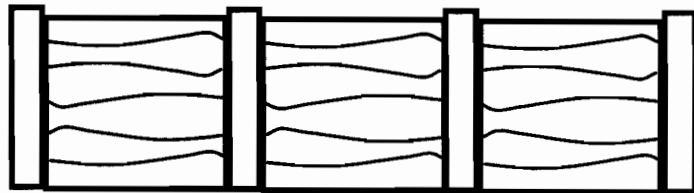
He pays $122 for 5 fence posts and 4 fence panels.

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? $95

Show how you figured it out.

$$10 \times 5 + 18 \cdot 4 = 122 ✓$$

Fencing
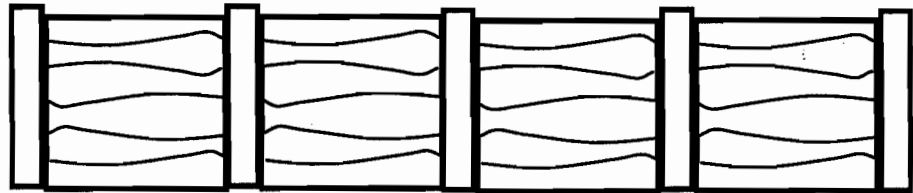
This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
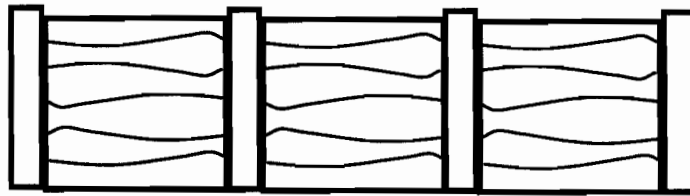
He pays $122 for 5 fence posts and 4 fence panels.

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? _____ $100 _____

Show how you figured it out.

$$5x + 4y = 122 \qquad\qquad x = 10$$
$$4y = 122 - 5x \qquad\qquad y = 30.5 - \frac{50}{4}$$
$$y = 30.5 - \frac{5}{4}x \qquad\qquad y = 20$$

$$21x + 20y = 570$$
$$21x + 20\left(30.5 - \frac{5}{4}x\right)$$
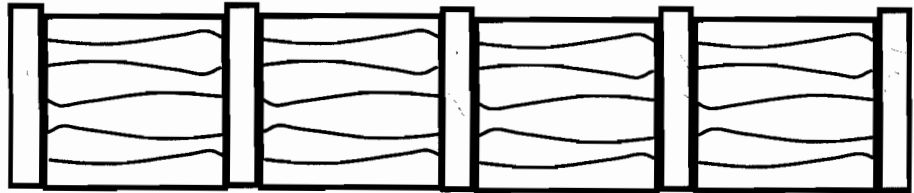$$21x + 610 - 25x = 570$$
$$-4x = -40$$

Fencing

This problem gives you the chance to:
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.
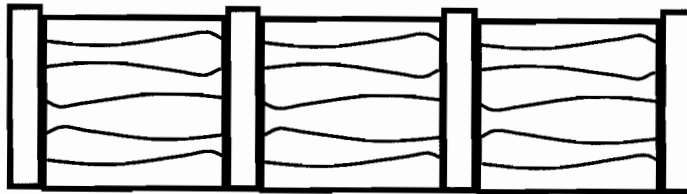
He pays $122 for 5 fence posts and 4 fence panels.

He pays $570 for 21 fence posts and 20 fence panels.

How much does he pay for 4 fence posts and 3 fence panels? $\underline{\$ 94}$

Show how you figured it out.

$$5x + 4y = 122 \qquad x = 10$$
$$21x + 20y = 570 \qquad y = 18$$