

# Fencing

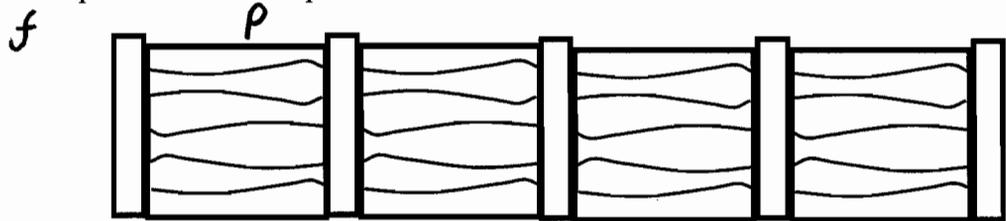
T1

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.



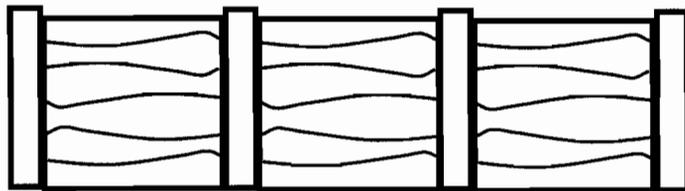
He pays \$570 for 21 fence posts and 20 fence panels.

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

\$94 ✓

3

Show how you figured it out.



$$\begin{array}{r}
 5f + 4p = 122 \quad \times 5 \quad \checkmark \\
 - 21f + 20p = 570 \quad \checkmark \\
 \hline
 25f + 20p = 610 \quad \checkmark \\
 \hline
 4f + \cancel{0p} = 40 \\
 f = 10 \quad \checkmark
 \end{array}$$

40 + 3.18

$$\begin{array}{r}
 5 \cdot 10 + 4p = 122 \\
 4p = 122 - 50 = 72 \div 4 \\
 p = 18 \quad \checkmark
 \end{array}$$

1  
1  
2  
1  
1



9

# Fencing

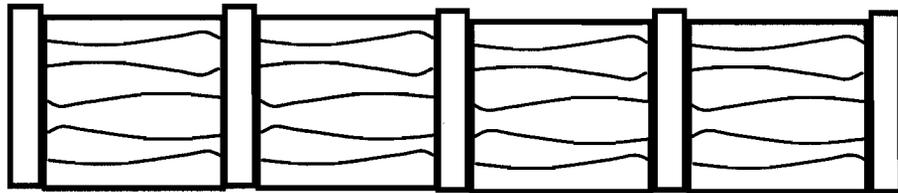
# T2

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.

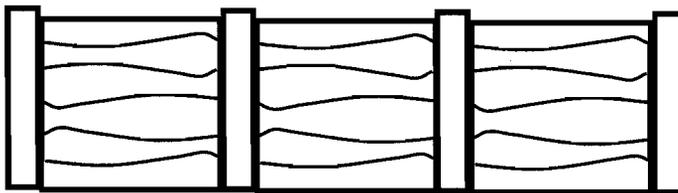


He pays \$570 for 21 fence posts and 20 fence panels.

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

112 \$ x 0

Show how you figured it out.



$$122/2 = 61/5 = 12.2$$

$$5 \cdot 12 = 60 \quad 122 - 60 = 62 \quad 62/4 = 15.5 \quad \times$$

$$5 \cdot 11 = 55 \quad 122 - 55 = 67 \quad 67/4 = 16.75 \quad \times$$

$$5 \cdot 10 = 50 \quad 122 - 50 = 72 \quad 72/4 = 18 \quad \checkmark$$

$$21 \cdot 10 + 20 \cdot 18 = 570 \quad \checkmark$$

$$40 + 4 \cdot 18 = 112 \quad \checkmark$$

9

4

# Fencing

# T3

This problem gives you the chance to:

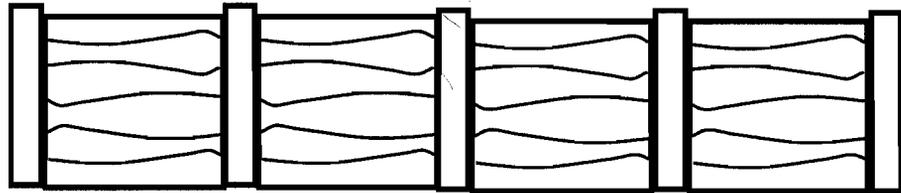
- interpret given information
- choose and use an appropriate method to solve a problem

Jon buys fencing for his yard.

$$5x + 4y = 122 \quad \checkmark$$

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

$$5(14) + 4(13) = 122$$



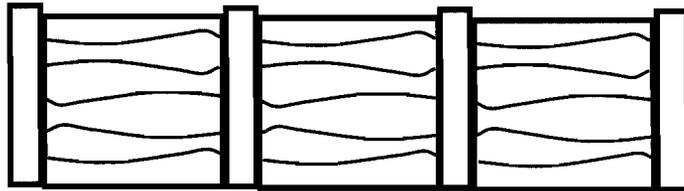
He pays \$570 for 21 fence posts and 20 fence panels.

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

$$\underline{94\$} \quad \checkmark$$

3

Show how you figured it out.



1  
1  
0

$$\begin{array}{r} 21x + 20y = 570 \quad \checkmark \\ 5x + 4y = 122 \\ \hline -5x \qquad -5x \end{array}$$

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

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

$$\frac{4y}{4} = \frac{122 - 5x}{4} \quad \wedge$$

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

$$\begin{array}{l} x = 10 \quad \checkmark \\ y = 18 \quad \checkmark \end{array}$$

9

# Fencing

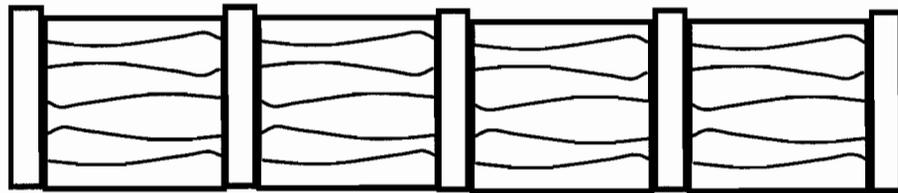
# T4

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.

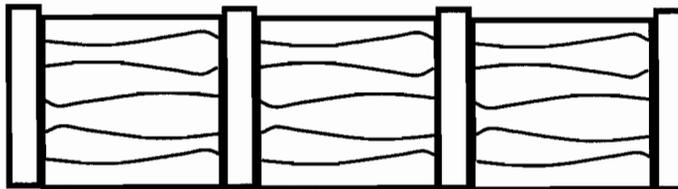


He pays \$570 for 21 fence posts and 20 fence panels.

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

94 ✓ 3

Show how you figured it out.



13x5  
14.25

$$21x + 20x = 570$$

$$5x + 4x = 122$$

$$9x = 122$$

posts = ~~16~~ 10  
panels = ~~10.5~~ 18

posts = 10 ✓  
panels = 18 ✓

0  
0  
0  
1  
1

9

# Fencing

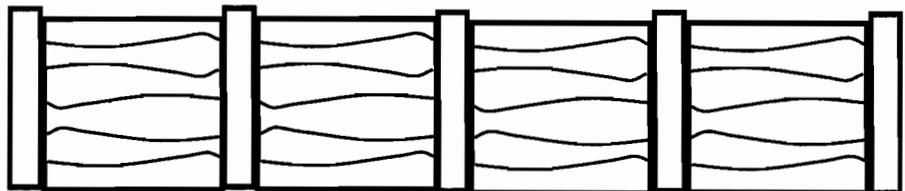
# T5

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.

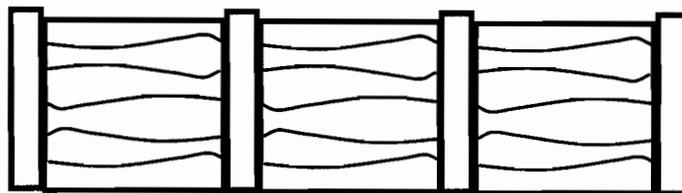


He pays \$570 for 21 fence posts and 20 fence panels.

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

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

Show how you figured it out.



$$\begin{array}{r} 10 \cdot 5 = 50 \\ \underline{- 50} \\ 72 \\ \underline{\quad 4} = 18 \end{array}$$

$$\begin{array}{r} 10 \times 21 = 210 \\ 18 \times 20 = 360 \end{array}$$

$$\begin{array}{r} \underline{\quad} \\ \$570 \end{array}$$

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

$$40 + 54 = \$94$$

3  
|  
|  
0  
|  
|

# Fencing

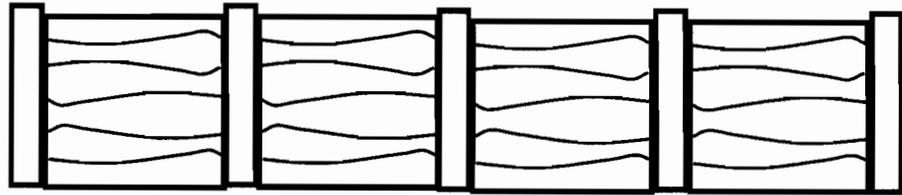
# S1

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.



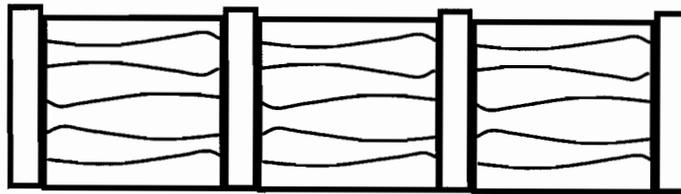
He pays \$570 for 21 fence posts and 20 fence panels.

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

\$94 ✓

3

Show how you figured it out.



$$122 = 5x + 4y$$

$$5 \times 10 = 50$$

$$4 \times 18 = +72$$


---


$$122 \checkmark$$

$$570 = 21x + 20y$$

$$21 \times 10 = 210$$

$$20 \times 18 = +360$$


---


$$570 \checkmark$$

$$? = 4x + 3y$$

$$4 \times 10 = 40$$

$$3 \times 18 = +54$$


---


$$94$$

1  
1  
0  
1  
1

# Fencing

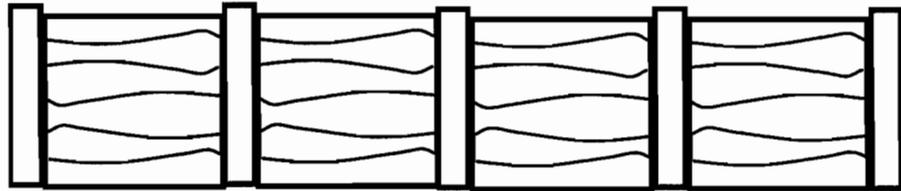
S2

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.



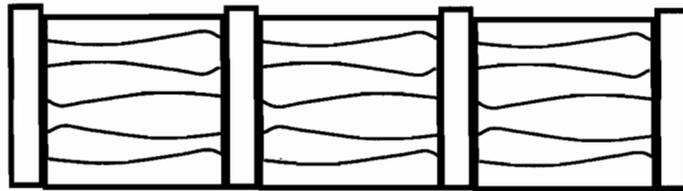
He pays \$570 for 21 fence posts and 20 fence panels.

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

\$102

0

Show how you figured it out.



1

1

2

1

1

$$\begin{array}{r}
 122 = 5x + 4y \quad \checkmark \\
 570 = 21x + 20y \quad \checkmark \\
 \hline
 \begin{array}{l}
 \cdot 5 \rightarrow 610 = 25x + 20y \\
 \rightarrow 570 = 21x + 20y \quad - \\
 \hline
 40 = 4x \\
 10 = x \quad \checkmark \\
 122 = 50 + 4y \\
 4y = 72 \\
 y = 18 \quad \checkmark
 \end{array}
 \end{array}$$

$$4 \cdot 18 + 3 \cdot 10 = 102$$

# Fencing

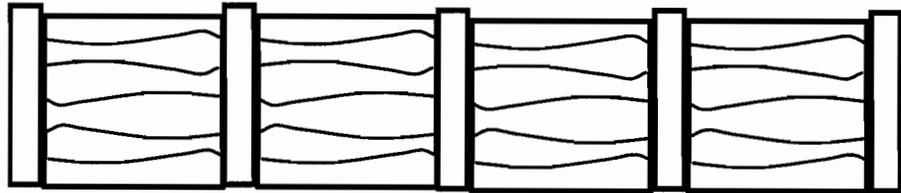
# S3

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.

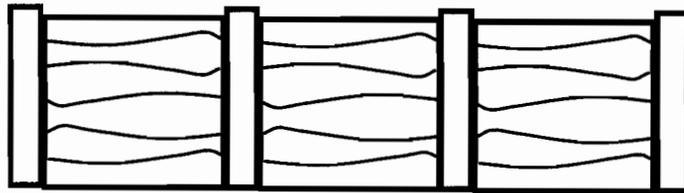


He pays \$570 for 21 fence posts and 20 fence panels.

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

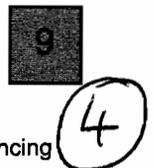
94 \$ ✓ 3

Show how you figured it out.



$5x + 4y = 122$  ✓  
I tried it on my  
calculator!

1  
0  
0  
0  
0



# Fencing

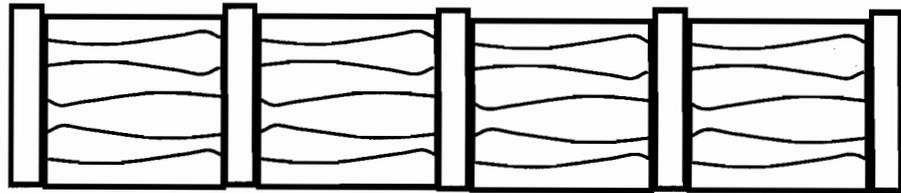
# S4

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.



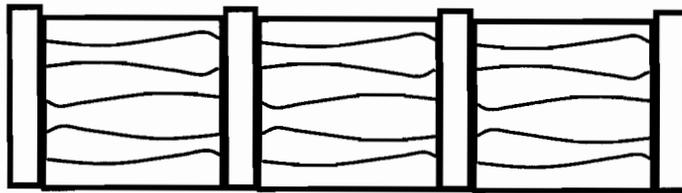
He pays \$570 for 21 fence posts and 20 fence panels.

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

\$94 ✓

3

Show how you figured it out.



~~$8s = 40$~~   
 ~~$9s = 45$~~   
 ~~$122 = 82/4$~~   
 ~~$122 = 77/4$~~   
 $10s = 50$   
 $122 - 50 = 72/4 = 18$  ✓  
 $4 \cdot 10 + 3 \cdot 18$

1  
0  
0  
1  
1



Fencing **6**

# Fencing

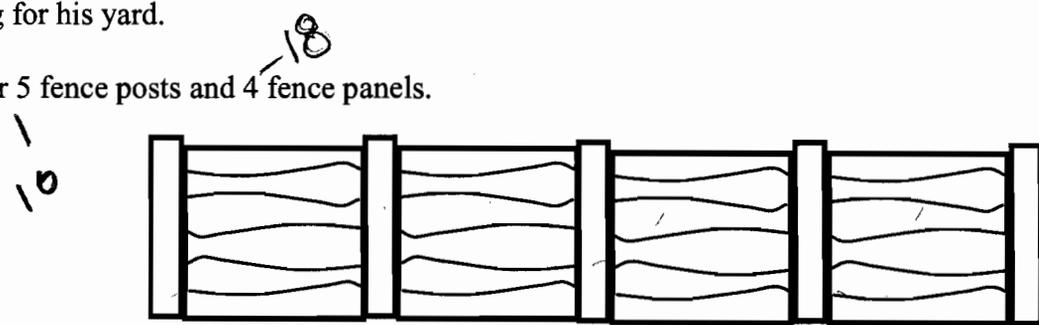
# S5

This problem gives you the chance to:

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Jon buys fencing for his yard.

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



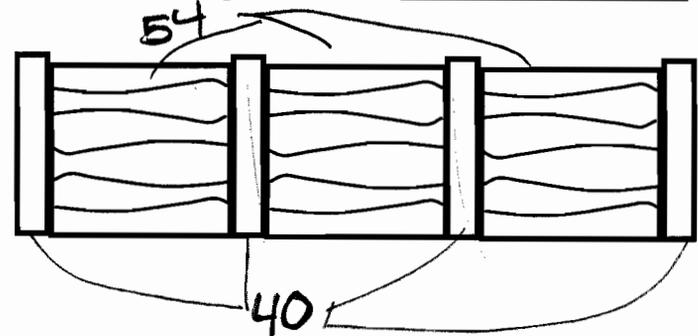
210

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 ✓ 3

Show how you figured it out.



each panel is 10\$ ✓  
 each post is 10\$ ✓

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

0  
0  
0  
1  
1

# Fencing

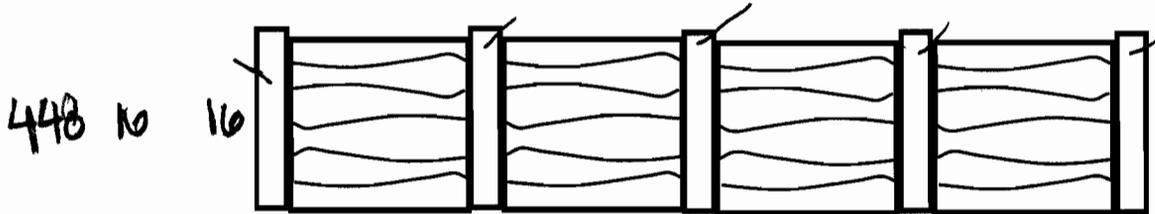
# S6

This problem gives you the chance to:

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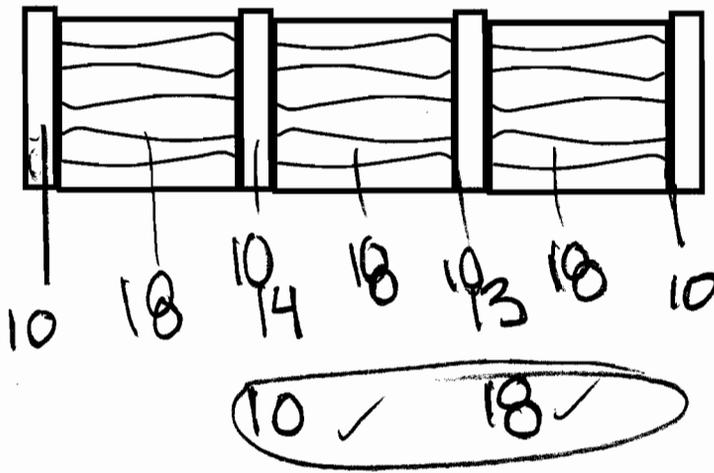
He pays \$570 for 21 fence posts and 20 fence panels.

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

\$94 ✓ 3

Show how you figured it out.

$$\begin{aligned}
 5p + 4a &= 122 \quad \checkmark \\
 -4a &= -4a \\
 \hline
 5p &= 122 - 4a \\
 \frac{5p}{5} &= \frac{122 - 4a}{5} \\
 p &= 24.4 - \frac{4}{5}a
 \end{aligned}$$



1  
0  
0  
1  
1

# Fencing

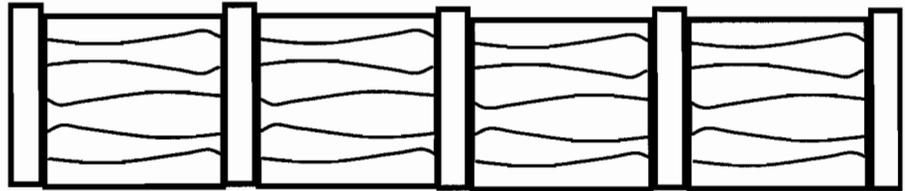
# S7

This problem gives you the chance to:

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Jon buys fencing for his yard.

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



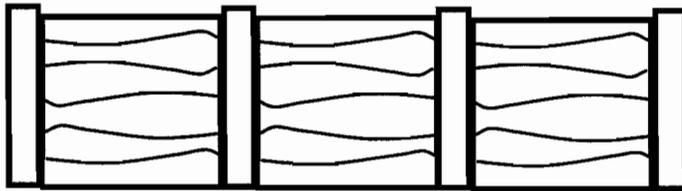
He pays \$570 for 21 fence posts and 20 fence panels.

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

\$94 ✓

3

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



1  
1  
2  
1  
1

$$\begin{array}{r}
 5x + 4y = 122 \quad \checkmark \\
 21x + 20y = 570 \quad \checkmark \\
 - 5x + 4y = 122 \\
 \hline
 16x + 16y = 448 \\
 - 5x + 4y = 122 \\
 \hline
 11x + 12y = 326 \\
 - 5x + 4y = 122 \\
 \hline
 6x + 8y = 204 \\
 - 5x + 4y = 122 \\
 \hline
 1x + 4y = 82
 \end{array}$$

$$\begin{array}{r}
 1x + 4y = 82 \\
 - 5x + 4y = 122 \\
 \hline
 -4x = -40 \\
 x = 10 \quad \checkmark \\
 50 + 4y = 122 \\
 4y = 72 \\
 y = 18 \quad \checkmark
 \end{array}$$

# Fencing

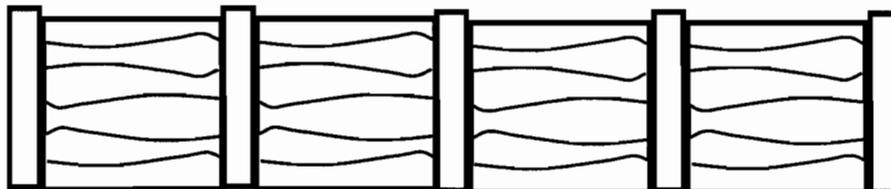
# S8

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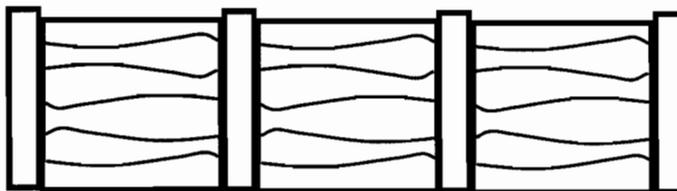


He pays \$570 for 21 fence posts and 20 fence panels.

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

$\$95 \times 0$

Show how you figured it out.



$10 \times 5 + 18 \cdot 4 = 122$

1  
0  
0  
1  
1

9

Fencing 3

# Fencing

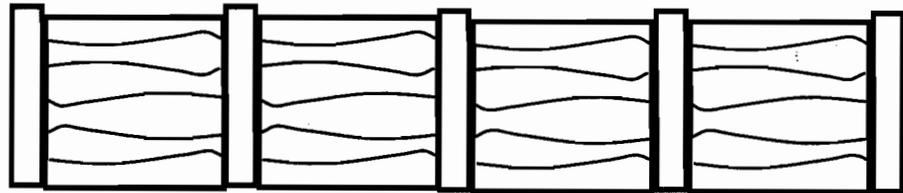
# S9

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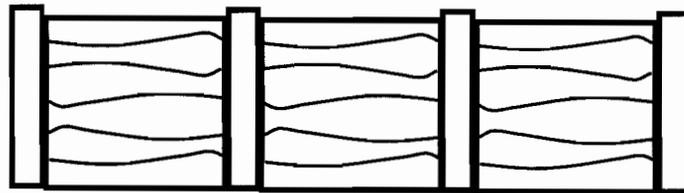


He pays \$570 for 21 fence posts and 20 fence panels.

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

\$100 × 0

Show how you figured it out.



$$5x + 4y = 122 \checkmark$$

$$4y = 122 - 5x$$

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

$$x = 10 \checkmark$$

$$y = 30.5 - \frac{50}{4}$$

$$y = 20 \times$$

$$21x + 20y = 570 \checkmark$$

$$21x + 20\left(30.5 - \frac{5}{4}x\right)$$

$$21x + 610 - 25x = 570$$

$$-4x = -40$$

0  
1  
1  
2  
1  
0

# Fencing

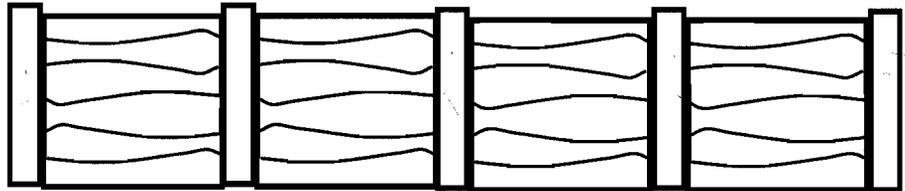
# S10

This problem gives you the chance to:

- interpret given information
- choose and use an appropriate method to solve a problem

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



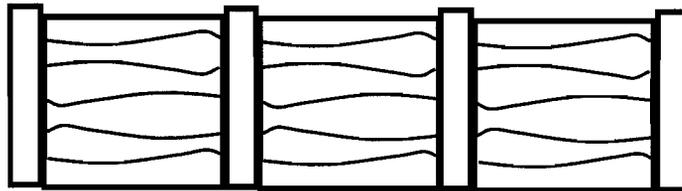
He pays \$570 for 21 fence posts and 20 fence panels.

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

\$94 ✓

3

Show how you figured it out.



$$5x + 4y = 122 \quad \checkmark$$

$$21x + 20y = 570 \quad \checkmark$$

$$x = 18 \quad \checkmark$$

$$y = 18 \quad \checkmark$$

1  
1  
0  
1  
1