

3-Point Holistic Rubric


Score Points:




























3 Points	<p>A three-point response is complete and correct.</p> <p>This response</p> <ul style="list-style-type: none">• demonstrates a thorough understanding of the mathematical concepts and/or procedures embodied in the task• indicates that the student has completed the task correctly, using mathematically sound procedures• contains clear, complete explanations and/or adequate work when required
2 Points	<p>A two-point response is partially correct.</p> <p>This response</p> <ul style="list-style-type: none">• demonstrates partial understanding of the mathematical concepts and/or procedures embodied in the task• addresses most aspects of the task, using mathematically sound procedures• may contain an incorrect solution but provides complete procedures, reasoning, and/or explanations• may reflect some misunderstanding of the underlying mathematical concepts and/or procedures
1 Point	<p>A one-point response is incomplete and exhibits many flaws but is not completely incorrect.</p> <p>This response</p> <ul style="list-style-type: none">• demonstrates only a limited understanding of the mathematical concepts and/or procedures embodied in the task• may address some elements of the task correctly but reaches an inadequate solution and/or provides reasoning that is faulty or incomplete• exhibits multiple flaws related to a misunderstanding of important aspects of the task, misuse of mathematical procedures, or faulty mathematical reasoning• reflects a lack of essential understanding of the underlying mathematical concepts• may contain a correct numerical answer but required work is not provided
0 Points	<p>A zero-point response is incorrect, irrelevant, incoherent, or contains a correct response arrived at using an obviously incorrect procedure. Although some parts may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.</p>

35

The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY	
	= 4 trees

Nursery	Number of Trees						
Wilson							
Bryant							
Klein							
Randolph							
Smiley							

How many trees are for sale at the Wilson nursery?

Answer _____ trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

Answer _____ trees

QUESTION 35

STRAND 5: STATISTICS AND PROBABILITY

Complete and Correct Response:

- 20 (trees)

AND

- Bryant nursery = 7 tree icons
 $7 \times 4 = 28$
Klein nursery = 6.5 tree icons
 $6.5 \times 4 = 26$
Smiley nursery = 3.5 tree icons
 $3.5 \times 4 = 14$
 $28 + 26 + 14 = 68$
OR other valid process

AND


- 68 (trees)






Score Points:

Apply 3-point holistic rubric.

35 The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY	
	= 4 trees

Nursery	Number of Trees
Wilson	
Bryant	
Klein	
Randolph	
Smiley	

How many trees are for sale at the Wilson nursery?

Answer 20 trees

$$\begin{array}{r} 4 \\ \times 5 \\ \hline 20 \end{array}$$

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.


<u>Bryant</u>	<u>Klein</u>	<u>Smiley</u>	
7	6	3	1
× 4	× 4	× 4	28
<hr/>	<hr/>	<hr/>	26
28	24	12	+ 14
	+ 2	+ 2	<hr/>
	26	14	68

Answer 68 trees






This response is complete and correct.

Score Point 3 (out of 3 points)

- 35 The pictograph below shows the number of trees for sale at five different nurseries.

KEY	
	= 4 trees

TREES FOR SALE

Nursery	Number of Trees
Wilson	 = 20
Bryant	
Klein	 = 26
Randolph	 20
Smiley	 14

How many trees are for sale at the Wilson nursery?

Answer 20 trees

$$\begin{array}{r} 126 \\ + 14 \\ \hline 140 \end{array}$$

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

$$\begin{array}{r} 26 \\ + 14 \\ \hline 40 \end{array}$$


Answer 40 trees

This response is partially correct. The student provides a correct answer for the number of trees at the Wilson nursery. Although the work and answer for the total number of trees is incorrect, the student correctly demonstrates how to determine the values within the pictograph.






Score Point 2 (out of 3 points)

35 The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY	
	= 4 trees

$$\begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array}$$

Nursery	Number of Trees
Wilson	
Bryant	
Klein	
Randolph	
Smiley	

How many trees are for sale at the Wilson nursery?

Answer 20 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

$$\begin{array}{r} 6 \\ \times 4 \\ \hline 24 \\ + 2 \\ \hline 26 \end{array}$$


Answer 26 trees






This response demonstrates only a limited understanding of the mathematical concepts embodied in the task. Although the student correctly determines the number of trees at the Wilson nursery, the work shown is not sufficient to demonstrate partial understanding.

Score Point 1 (out of 3 points)

- 35 The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY	
	= 4 trees

Nursery	Number of Trees
Wilson	
Bryant	
Klein	
Randolph	
Smiley	

How many trees are for sale at the Wilson nursery?

Answer 5 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

$$7 + 7 + 4 = 22$$

Answer 22 trees


This response is incorrect. The response does not demonstrate even a limited understanding of the mathematical concepts embodied in the task.






Score Point 0 (out of 3 points)

35

The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY
 = 4 trees

Nursery	Number of Trees
Wilson	
Bryant	
Klein	
Randolph	
Smiley	

How many trees are for sale at the Wilson nursery?

Answer 20 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.


$$\begin{array}{r} 217 \\ \times 4 \\ \hline 68 \end{array}$$






Answer 68 trees

35

The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY
 = 4 trees

Nursery	Number of Trees
Wilson	
Bryant	
Klein	
Randolph	
Smiley	

How many trees are for sale at the Wilson nursery?

Answer 20 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

$$\begin{array}{r} 217 \\ \times 4 \\ \hline 868 \end{array}$$

Answer 68 trees


This response is complete and correct.






Score Point 3 (out of 3 points)

35

The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY
 = 4 trees

Nursery	Number of Trees
Wilson	 20
Bryant	 28
Klein	 26
Randolph	 16
Smiley	 14

How many trees are for sale at the Wilson nursery?

Answer 104 trees

$$\begin{array}{r}
 28 \\
 26 \\
 20 \\
 16 \\
 14 \\
 \hline
 104
 \end{array}$$

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?


Show your work.






$$\begin{array}{r}
 28 \\
 14 \\
 \hline
 42
 \end{array}$$

Answer 42 trees

35 The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY	
	= 4 trees

Nursery	Number of Trees
Wilson	 20
Bryant	 28
Klein	 26
Randolph	 16
Smiley	 14

How many trees are for sale at the Wilson nursery?

Answer 104 trees

28
26
20
16
14

104

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

28
14

42

Answer 42 trees


This response demonstrates only a limited understanding of the mathematical concepts embodied in the task. Although the response exhibits many flaws, it is not completely incorrect. The student demonstrates how to interpret the values within the pictograph correctly.






Score Point 1 (out of 3 points)

35

The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY
 = 4 trees

Nursery	Number of Trees
Wilson	
Bryant	
Klein	
Randolph	
Smiley	

How many trees are for sale at the Wilson nursery?

Answer 20 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.


$$\begin{array}{r}
 B \ 36 \\
 + \ 32\frac{1}{2} \\
 + \ 20\frac{1}{2} \\
 \hline
 69\frac{1}{2}
 \end{array}$$






K $32\frac{1}{2}$, S $20\frac{1}{2}$

Answer $69\frac{1}{2}$ trees

35 The pictograph below shows the number of trees for sale at five different nurseries.

TREES FOR SALE

KEY
 = 4 trees

Nursery	Number of Trees
Wilson	
Bryant	
Klein	
Randolph	
Smiley	

How many trees are for sale at the Wilson nursery?

Answer 20 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

$$\begin{array}{r}
 B \ 36 \\
 + \ 32\frac{1}{2} \\
 \hline
 20\frac{1}{2} \\
 \hline
 69\frac{1}{4}
 \end{array}$$

K 32 1/2, S 20 1/2


Answer 69 1/4 trees

This response is incorrect. The response does not demonstrate even a limited understanding of the mathematical concepts embodied in the task. The values presented within the work demonstrate an obviously incorrect procedure for interpreting the pictograph.

Score Point 0 (out of 3 points)




























35

The pictograph below shows the number of trees for sale at five different nurseries.

KEY	
	= 4 trees

$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$

TREES FOR SALE

Nursery	Number of Trees	
Wilson	    	
Bryant	      	
Klein	      	
Randolph	   	
Smiley	   	

How many trees are for sale at the Wilson nursery?

Answer 20 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

Answer 70 trees

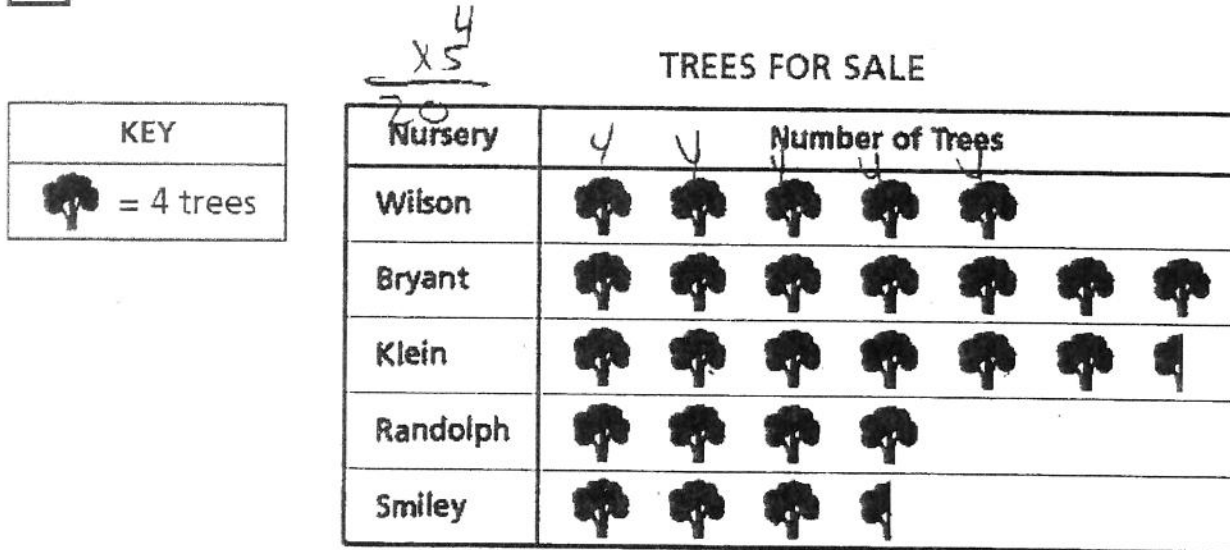
$$\begin{array}{r}
 7 \\
 \times 4 \\
 \hline
 28
 \end{array}$$

$$\begin{array}{r}
 26.5 \\
 \times 4 \\
 \hline
 26.0
 \end{array}$$

$$\begin{array}{r}
 23.5 \\
 \times 4 \\
 \hline
 14.0
 \end{array}$$

$$\begin{array}{r}
 28 \\
 + 26 \\
 + 16 \\
 \hline
 70
 \end{array}$$

35 The pictograph below shows the number of trees for sale at five different nurseries.



How many trees are for sale at the Wilson nursery?

Answer 20 trees

What is the total number of trees for sale at the Bryant nursery, the Klein nursery, and the Smiley nursery?

Show your work.

Handwritten work showing multiplication and addition:

$$\begin{array}{r}
 7 \\
 \times 4 \\
 \hline
 28
 \end{array}$$

$$\begin{array}{r}
 26.5 \\
 \times 4 \\
 \hline
 26.0
 \end{array}$$

$$\begin{array}{r}
 23.5 \\
 \times 4 \\
 \hline
 14.0
 \end{array}$$

Answer 70 trees

$$\begin{array}{r}
 228 \\
 + 26 \\
 + 16 \\
 \hline
 70
 \end{array}$$

This response is partially correct. A correct answer and sound mathematical procedure are provided; however, a transcription error results in an incorrect answer (14 is changed to 16).

Score Point 2 (out of 3 points)