

NJ ASK Math Grade 4

Saving Money

Scoring Rubric

3 points

- The student determines the correct amount of money at the end of week five.
- The student explains the pattern used to get his/her answer.
- The student indicates how many weeks to save at least \$12.00 (7 weeks).
- The student shows his/her work for finding how many weeks to save at least \$12.00.

Sample 3–point response:

- \$8.75
- I added \$1.75 to \$7.00
- 7 weeks
- I continued the chart until I hit \$12.00. Week 6 – \$10.50, Week 7 – \$12.25

2 points

- The student determines the correct amount of money at the end of week five.
- The student does not explain the pattern used to get his/her answer.
- The student indicates how many weeks to save at least \$12.00.
- The student shows his/her work for finding how many weeks to save at least \$12.00.

OR

- The student determines the correct amount of money at the end of week five.
- The student explains the pattern used to get his/her answer.
- The student indicates how many weeks to save at least \$12.00.
- The student does not show his/her work for finding how many weeks to save at least \$12.00.

OR

- The student does not determine the correct amount of money at the end of week five.
- The student explains the pattern used for saving money.
- The student indicates how many weeks to save at least \$12.00.
- The student shows his/her work for finding how many weeks to save at least \$12.00.

1 point

- The student determines the correct amount of money at the end of week five.
- The student explains the pattern used to get his/her answer.
- The student does not correctly answer or fails to answer the second bullet.

NJ ASK Math Grade 4
Saving Money
Scoring Rubric
Continued

1 point–cont’d

OR

- The student determines the correct amount of money at the end of week five.
- The student does not explain the pattern used to get his/her answer.
- The student indicates how many weeks to save at least \$12.00.
- The student does not show his/her work for finding how many weeks to save at least \$12.00.

OR

- The student does not determine the correct amount of money at the end of week five.
- The student explains the pattern of saving.
- The student indicates how many weeks to save at least \$12.00.
- The student does not show his/her work for finding how many weeks to save at least \$12.00.

0 points

- The response shows insufficient understanding of the problem’s mathematical concepts.

NJ ASK MATH Grade 4
Tonya's Rectangular Model
Scoring Rubric

3 points

The student:

- Lists any two correct number sentences that represent the given model.
 $3 \times 13 = 39$ $13 \times 3 = 39$
 $13 + 13 + 13 = 39$ $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 39$
- Draws a model when one more block is added to make a new rectangular model of 40.
- Lists two correct multiplication number sentences to represent the new rectangular model drawn.
 $1 \times 40 = 40$ $4 \times 10 = 40$ $8 \times 5 = 40$ $20 \times 2 = 40$
 $2 \times 20 = 40$ $5 \times 8 = 40$ $10 \times 4 = 40$ $40 \times 1 = 40$

Sample 3--point response:

- $3 \times 13 = 39$ $13 \times 3 = 39$
- Draws a model of four rows of 10 blocks.
- $4 \times 10 = 40$ $10 \times 4 = 40$

2 points

The student:

- Lists any two correct number sentences for the given model.
- Draws a new rectangular model of 40.
- Lists two correct number sentences with the same product, but one of those is not based on the new model shown.

OR

- Lists one correct number sentence for the given model.
- Draws a new rectangular model of 40.
- Lists two correct multiplication number sentences for the new model.

OR

- The two number sentences of the given model are incorrect or missing.
- Draws a new rectangular model of 40.
- Lists two correct multiplication number sentences for the new model.

OR

- Lists any two correct number sentences for the given model.
- Draws the model to represent a new rectangular model of 40.
- Lists one correct multiplication number sentence for the new model **OR** the two number sentences of the new model are incorrect or missing.

NJ ASK MATH Grade 4
Tonya's Rectangular Model
Scoring Rubric
Continued

2 points–cont'd

The student:

- Lists one correct number sentence for the given model.
- Draws the model to represent a new rectangular model of 40.
- Lists one correct multiplication number sentence for the new model.

1 point

The student:

- Lists one correct number sentence for the given model.
- Draws the model to represent a new rectangular model of 40.
- The two number sentences of the new model are incorrect or missing.

OR

- The two number sentences of the given model are incorrect or missing.
- Draws the model to represent a new rectangular model of 40.
- Lists one correct number sentence to represent the new model.

OR

- Lists any two correct number sentences for the given model.

0 points

- The student shows insufficient understanding of the problem's essential mathematical concepts by having only one, a partial, or no elements correct.

NJ ASK MATH Grade 4

Buddy's Collar Scoring Rubric

3 points

The student:

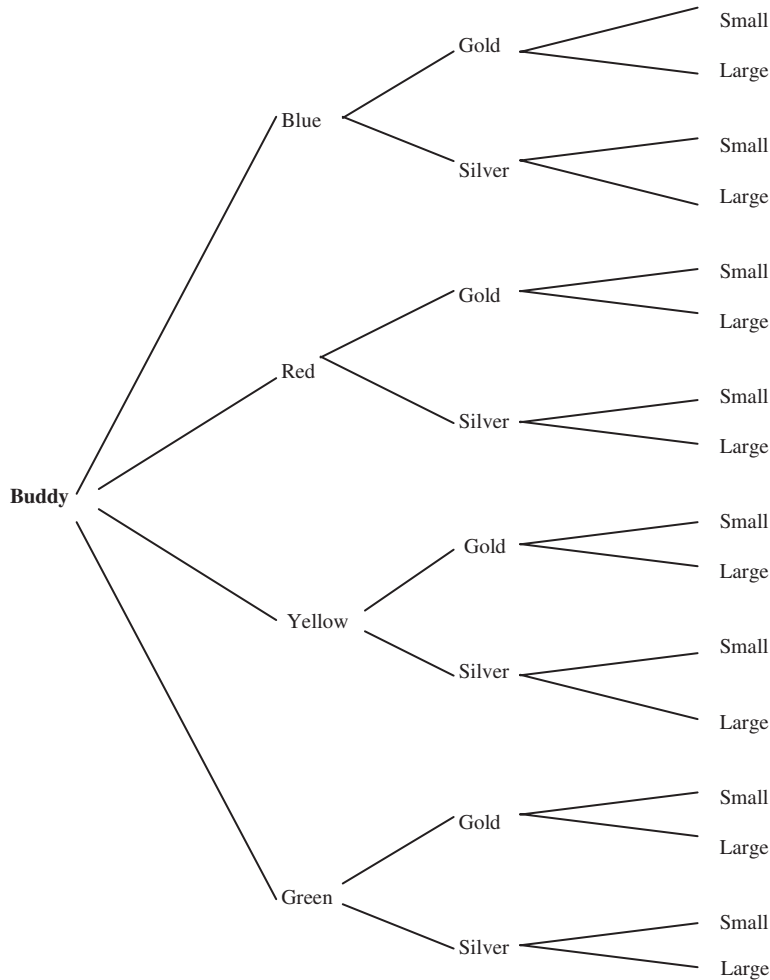
- Correctly shows a tree diagram or an organized list with a total of 8 correct combinations for the two items (collar and bell).
- Correctly states that there are 16 total combinations for the three items (collar, bell, and name tag).
- Correctly shows work (a tree diagram, mathematical solution, or an organized list) or explanation for the 16 combinations.

Sample 3–point response:

- There are 8 (4 collars x 2 bells = 8 combinations) possible combinations of collars and bells:

Blue & Gold	Red & Gold	Yellow & Gold	Green & Gold
Blue & Silver	Red & Silver	Yellow & Silver	Green & Silver

- There are 16 different combinations of the 3 items.
- $4 \text{ collars} \times 2 \text{ bells} \times 2 \text{ name tags} = 16 \text{ combinations}$.



NJ ASK MATH Grade 4

Buddy's Collar Scoring Rubric Continued

2 points

The student:

- Shows a diagram or an organized list with a total of 8 correct combinations of collars and bells.
- Correctly notes that there are 16 different combinations for the collars, bells, and name tags.
- Does not provide an appropriate explanation or work.

OR

- Shows a diagram or an organized list that includes a minor error in the total number of combinations (7 combinations).
- States the number of combinations for the collars, bells, and name tags based on that error.
- Correctly shows or explains the number of combinations for three items that is consistent with the previous error made.

OR

- Shows a diagram or an organized list with the total number of 8 correct combinations.
- Does not state that there are 16 combinations for the collars, bells, and name tags, **but**
- Correctly shows or explains the 16 combinations for the three items.

OR

- Correctly notes that there are 16 different combinations for the collars, bells, and name tags.
- Correctly shows or explains the 16 combinations for the three items.

1 point

The student:

- States the total number of 8 correct combinations for bullet 1.
- Incorrectly states the number of combinations for the collars, bells, and name tags.
- Provides a diagram or an organized list that leads to an incorrect total number of combinations for the three items.

OR

- Shows only a tree diagram or organized list with a total of 8 correct combinations for bullet 1.

OR

- States the total number of 8 combinations for bullet 1 (no work).
- States the total number of 16 combinations for bullet 2 (no work).

0 points

- The student shows insufficient understanding of the problem's essential mathematical concepts.

NJ ASK MATH Grade 4

Maria's Apple Pies

Scoring Rubric

3 points

The student:

- Shows or explains that Maria can make a total of four pies with 36 apples with four apples left over; **and**
- Explains or shows work ($3 \times 12 = 36$, $36 \div 8 = 4 \text{ R}4$).
- Shows or explains that Maria will need to buy one more bag of apples to make a total of six pies; **and**
- Gives an appropriate explanation or shows work (must use 12); for example, $6 \times 8 = 48$, $48 \div 12 = 4$ bags. She has 3 bags and 4 apples left over. $12 + 4 = 16$, which is how many apples she needs to make two more pies which will then equal a total of six pies, so she needs one more bag.

Sample 3–point response:

- 4 pies with 4 apples left over.
- $3 \times 12 = 36$, $36 \div 8 = 4 \text{ R}4$
- She will need to buy one more bag **because**
- If she buys one more bag, she will have a total of 16 apples ($12 + 4 = 16$) and $16 \div 8 = 2$ pies. Two pies added with four pies make a total of six pies. Maria needs to buy only one more bag to make a total of six pies.

2 points

The student:

- Shows or explains that Maria can make a total of four pies with 36 apples; **and**
- Explains or shows work ($3 \times 12 = 36$, $36 \div 8 = 4 \text{ R}4$).
- Indicates that Maria will need to buy one more bag of apples to make a total of six pies, **but**
- Has a limited or no explanation.

OR

- Shows or explains that Maria can make a total of four pies with 36 apples; **and**
- Explains or shows work ($3 \times 12 = 36$, $36 \div 8 = 4 \text{ R}4$).
- Does not specifically state that Maria must buy one more bag, **but**
- Clearly shows with computations that Maria will need to buy one more bag of apples to make a total of six pies.

NJ ASK MATH Grade 4
Maria’s Apple Pies
Scoring Rubric
Continued

2 points – cont’d

OR

- Shows or explains that Maria can make a total of four pies with 36 apples; **but**
- Does not explain or show work ($3 \times 12 = 36$, $36 \div 8 = 4$ R4).
- Shows or explains that Maria will need to buy one more bag to make a total of six pies, **and**
- Gives an appropriate explanation or shows work (must use 12).

1 point

The student:

- Shows or explains that Maria can make a total of four pies with 36 apples; **and**
- Explains or shows work ($3 \times 12 = 36$, $36 \div 8 = 4$ R4).
- Does not state that Maria must buy one more bag.
- Has no explanation.

OR

- Does not show or explain that Maria can make a total of four pies.
- Does not explain or show work ($3 \times 12 = 36$, $36 \div 8 = 4$ R4).
- Shows or explains that Maria will need to buy one more bag of apples to make a total of six pies; **and**
- Gives an appropriate explanation or shows work (must use 12).

OR

- Shows or explains that Maria can make a total of four pies with 36 apples; **but**
- Explains or shows work with one minor computation error; **and**
- Shows or explains the correct number of bags to buy based on the computation error made.

OR

- Shows or explains that Maria can make a total of four pies, **and**
- Indicates that Maria will need to buy one more bag of apples.

0 points

- The response shows insufficient understanding of the problem’s essential mathematical concepts. The response is incomplete, inaccurate, and contains major errors.

NJ ASK MATH Grade 4

Abby's House

Scoring Rubric

3 points

The student:

- Correctly lists the places Abby passed on her walk, including the place where she ended.
- Correctly writes directions for Bryan to follow from school to his house.
- Correctly writes directions for Bryan to follow from his house to Abby's house.

Sample 3–point response:

- hospital, post office, school
- walk one block north and three blocks west (other routes are possible)
- walk five blocks south and one block east (other routes are possible)

2 points

The student:

- lists the hospital, post office, and school.
- has a minor error in the directions for the second bullet.

OR

- incorrectly lists one or more of the places passed.
- answers the second bullet correctly and completely.

1 point

The student:

- lists the hospital, post office, and school.
- does not answer the second bullet correctly.

OR

- shows limited understanding of the problem and may attempt to follow and give directions; however, the response contains major errors or omissions.

0 points

- The response shows insufficient understanding of the problem's essential mathematical concepts.