Calendar Math

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Below are the math problems for the month of September—one problem for each day of the month.

1. Tom bought nine apples and eight oranges. He spent $2.29 altogether. If the oranges cost $1.20, how much did he spend on apples?
2. How much did each orange cost?
3. How much did each apple cost?
4. If Tom gave the clerk a $5 bill, how much change did he get back?
5. If Tom had bought 13 oranges, what would they have cost?
6. What is the better buy: six apples for 42¢ or nine apples for 54¢?
7. Jill bought some grapes. She gave the clerk a $10 bill and got $6.01 in change. How much did the grapes cost?
8. If grapes sell for $1.33 per pound, how many pounds did Jill buy?
9. Watermelons sell for $5.38 each. What would half a watermelon sell for?
10. A watermelon weighs 4.5 kg. If each person eats 0.5 kg, how many people will be able to eat from the watermelon?
11. Steak costs $10.36 per kilogram and pork chops cost $8.78 per kilogram. If Susan buys 1.5 kg of steak and 1 kg of pork chops, how much must she pay?
12. Bill can eat $1/3$ of a banana in three minutes. How long will it take him to eat the whole banana?
13. If Susan eats two plums on the first day and doubles the number she eats each day after that, how many plums will she eat on the third day?
14. How many plums will Susan have eaten altogether?
15. If the plums cost 9¢ each, how much money did Susan spend on plums?
16. Joe can eat a hamburger in 15 minutes. How long will it take him to eat six hamburgers?
17. Tanya ate ½ her candy on Monday, ¼ on Tuesday and $1/8$ on Wednesday. How much did she have left?
18. Orville ate ¼ of his chocolate bar. Ann ate $5/8$ of hers. How much more of her bar did Ann eat than Orville did of his?
19. Jan's garden is 10 m × 12 m. Ronald's garden is 8 m × 11 m. How much bigger is Jan's garden?
20. If Jan can dig 12 m² per hour, how long will it take her to dig her garden?
21. Rachel's apple tree is 5 m tall. Willie says his apple tree is half again as tall. How tall is Willie's apple tree?
22. When Robert was digging potatoes, he found that the first hill had two potatoes, the next hill had four potatoes, the next hill had eight potatoes and so on. If this pattern continued, how many potatoes were under the fifth hill?
23. If Robert dug four hills, how many potatoes did he dig altogether?
24. Peter's cantaloupe is 16 cm in diameter. What is its volume?
25. Raspberries cost $6 for a 4 L basket. At that price, what would a 6 L basket cost?
26. Corncobs normally sell for $4 a dozen. However, the grocery store has a 40 per cent reduction sale. What is the selling price of a dozen cobs?
27. A sausage 20 cm long will feed four people. A sausage 35 cm long will feed how many people?
28. Lou says he can buy seven kiwi fruits for 84¢. Leslie says she can buy nine kiwi fruits for 99¢. Who gets the better buy and by how much per kiwi fruit?
29. Three lemons can make enough juice for 2 L of lemonade. How many lemons would be necessary to make 16 L of lemonade?
30. Cherries were first in the store on June 3. Peaches did not become available for another 35 days. What day were peaches available?

Answers

1. $1.09
2. 15¢
3. 12¢
4. $2.71
5. $1.95
6. Nine apples for 54¢
7. $3.99
8. 3 lbs.
9. $2.69
10. Nine people
11. $24.32
12. Nine minutes
13. Eight plums
14. 14 plums
15. $1.26
16. 90 minutes, or 1½ hours
17. ⅛
18. ⅜
19. 32 m²
20. 10 hours
21. 7.5 m
22. 32 potatoes
23. 30 potatoes
24. 2,143.57 cm³
25. $9
26. $2.40
27. Seven people
28. Leslie, by 1¢ per kiwi fruit
29. 24 lemons
30. July 8

A farmer cultivated twice as much land this year as last year. Last year the weather was perfect, but this year unfavourable weather conditions caused him to lose 1/3 of his crop. What was the ratio of this year's crop production to last year's?