

Calendar Math

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- If the second day of a month falls on a Tuesday, what day will the 22nd fall on?
- Tom is 3 years older than Karen will be next year. Karen is 10 years old now. How old is Tom?
- Bill lives on one corner of a rectangle, and Sig lives on the opposite corner. The rectangle is 3 km by 4 km. Bill wants to take the shortest distance to Sig's place. How far will he have to go?
- Susan and Olive live 6 km from town. Susan starts to walk at 11 a.m. She walks at 4 km per hour. Olive leaves at 12 noon on her bike. She goes 10 km per hour. How much later than Susan will she arrive?
- Add the next 4 digits to the following sequence. 1, 0, 2, 1, 3, 2, 4, , , ,
- Rose buys a coat for \$80. When selling it, she marks it up 25 percent. However, to sell it she has to give a discount of 25 percent. How much does she make or lose on the coat?
- Willie says that if he had 5 more marbles he would have 4 times as many as Bob. Bob has 20 marbles. How many does Willie have?
- I have 90 cents consisting of dimes and quarters. In total, I have six coins. How many dimes and how many quarters do I have?
- Complete this division:

$$\begin{array}{r} 4\overline{)187} \\ \underline{160} \\ 27 \\ \underline{} \\ R \end{array}$$
- Marcel picked 1 litre of blueberries on Monday. Then he doubled the number of litres he picked each day until Friday. How many litres did he pick?
- If Marcel got 73 cents for each litre of blueberries, how much did he earn?
- This morning the temperature was +4°C. By night it had fallen 15°C. What was the temperature at night?
- James enjoys collecting hockey cards. He had 4 boxes, each containing 97 cards. How many cards did he have in total?
- It snowed 5 cm on Monday, 7 cm on Tuesday, 3 cm on Wednesday, 0 cm on Thursday and 8 cm on Friday. What was the average snowfall per day?
- Draw a line 5 cm long. What is the length in millimetres?
- There are 117 more people in Dunceville than in Snoozeville. If there are 210 people in Snoozeville, how many are there in Dunceville?
- On a flight from Edmonton to Calgary, there were 173 passengers on board. Fifty-seven asked for pillows. How many did not ask for pillows?
- On a flight, there were 235 passengers on board. Eighty-three wanted to read the *Journal* and 52 wanted to read the *Sun*, while the rest slept. How many slept?
- Express each whole number from 10 to 20 as the sum of not more than 4 square numbers. For example, $14 = 9 + 4 + 1$.
- Find 3 fractions such that when you add 1 to each numerator and denominator, the result is $\frac{1}{2}$. Are there more?
- Find 2 numbers whose sum is 12 and difference is 8.
- If the complement of an angle is 41 degrees, what is its supplement?
- Cynthia wants a candy bar cut into 12 equal pieces for her friends. How many cuts will she have to make?
- What number squared and doubled is the same?
- A grasshopper is 4 cm long and an earthworm is 7.5 cm long. How much longer is the earthworm?
- A rabbit can eat 2.5 centimetres of a carrot in a minute. How long will it take a rabbit to eat a carrot that is a decimetre long?

27. Sandra can run a kilometre in 12 minutes. It takes Juanita $1\frac{1}{2}$ times as long to run a kilometre. How long does it take Juanita to run a kilometre?
28. These numbers are bozos: 5 and 8; 6 and 7; 3 and 10; 2, 8 and 3.
These numbers are not bozos: 4 and 3; 3; 9 and 6; 1 and 11; 7, 2 and 2.
What makes a bozo?
29. A truck delivered 268 pieces of sod. It was placed on 4 plastic platforms. How many pieces of sod were on each platform?
30. Last week gasoline was 78 cents a litre. This week, because of a price war, the price is 59 cents a litre. It takes 43 litres to fill my car. How much did I save this week?
31. Wesley changes oil in his car every 5,000 kilometres. He last changed oil when the odometer read 57,633 kilometres. When will he have to change oil again?

10. 31 litres
11. \$22.63
12. -11°C
13. 388 cards
14. 4.6 cm per day
15. 50 mm
16. 327 people
17. 116 passengers did not ask for pillows
18. 100 passengers
19. $10 = 9 + 1$
 $11 = 9 + 1 + 1$
 $12 = 4 + 4 + 4$
 $13 = 4 + 4 + 4 + 1$
 $14 = 9 + 4 + 1$
 $15 = 9 + 4 + 1 + 1$
 $16 = 4 + 4 + 4 + 4$
 $17 = 16 + 1$
 $18 = 9 + 9$
 $19 = 9 + 9 + 1$
 $20 = 16 + 4$

Answers may vary.

20. $\frac{3}{7}$, $\frac{4}{9}$, $\frac{5}{11}$. Yes, there are more.
21. 10 and 2
22. 131 degrees
23. 11 cuts
24. 2
25. 3.5 cm longer
26. 4 minutes
27. 18 minutes
28. They add up to 13.
29. 67 pieces
30. \$8.17
31. 62,633 km

Answers

1. Monday
2. 14 years
3. 5 km
4. 6 minutes
5. 3, 5, 4, 6
6. She loses \$5
7. 75 marbles
8. 4 dimes, 2 quarters
9.

$$\begin{array}{r} 4\overline{)187} \\ \underline{160} \\ 27 \\ \underline{24} \\ 3R \end{array}$$

These problems vary considerably in level of difficulty. However, with slight modifications they can be made suitable for most grades. Have fun.

One hundred and five planks are to be piled in six layers. Each successive layer is to be one less plank than the previous layer below. How many planks are there in the bottom layer?
