

MATHSWELL 2013
Years 5 & 6 Problem Solving

Question 1:

The product of 3 consecutive numbers is 336.
What is the first number?

Question 2:

A train arrives at its destination at 11:45 a.m. after a trip of one hour and 55 minutes.
At what time did it depart?

Question 3:

How many edges are there on a cube?

Question 4:

Form the largest number you can make with the numbers 8, 2, 9 and 5
Subtract the smallest number that you can make.
You must use all the digits in both numbers.
What is the answer?

Question 5:

Circle the number in which the 3 represents three hundred thousand

537 105

3 192 684

943 027

1 368 572

QUESTION 6:

ALL C.D.'s REDUCED:

20% OFF

NOW ONLY PAY

\$24

What was the original price for a C.D.?

QUESTION 7:

A hotel has 9 floors with bed rooms. Each floor has twelve bed rooms with equal numbers of single and double rooms. Single rooms have one person in them and double rooms have 2 people in them.

How many people are staying if the hotel is full?

QUESTION 8:

A ball bounces exactly half the height from which it is dropped. If a ball is dropped from the top of a building that is 32 metres tall how high will it bounce on its 7th bounce?

QUESTION 9:

The average of 5 scores in a test was 7.

Abby scored 6, Becky scored 10, Cam scored 6 and David scored 5.

What did the 5th person score?

QUESTION 10:

Complete the next 5 numbers in this pattern: All 5 must be correct for the mark.

95, 94, 91, 86, , , , ,

QUESTION 11:

A floor tiler charged \$225 to tile a rectangular room.

His next job was to tile a room that was twice as long and twice as wide.

What will he charge for this job?

QUESTION 12:

Which is the smallest?

2^8

3^5

4^4

QUESTION 13:

I have 3 piles of coins. The 1st pile has twice as many coins as the second pile and the 3rd has three times as many coins as the second pile.

There are 42 coins altogether.

How many coins in each pile? A

B

C

QUESTION 14:

A cube has the dimensions of 3 cm x 4 cm x 2 cm.

What is the least number of SQUARE centimetres of paper needed to cover this cube completely?

QUESTION 15:

Before her holiday, Laura wanted to buy 2 scarves @ \$8.95 each, 1 jacket @ \$29.95 and 3 T-shirts @ \$ 9.95 each.

If Laura had \$75, how much money would she need to borrow to be able to buy all of these items?

QUESTION 16:

The Campbell family had a total of 11 pets, all either rabbits or birds.

If there are a total of 36 legs on the pets, how many of each are there?

QUESTION 17:

Which of the 4 below has the largest answer?

- a) Thirty-three times three times three
- b) Two times twenty-two, times three, times two
- c) Double 33, then triple the answer
- d) Triple 22, then double the answer

QUESTION 18:

A carton holds 2 dozen cans of drink. Each can contains 375 ml.
How many LITRES of drink are there in three cartons?

QUESTION 19:

If the average of 6 scores is 80 and the other scores are:
75, 90, 79, 71 and 83

What is the 6th score?

QUESTION 20:

What is the largest number that will divide into 154 and also 196 with no remainder?

QUESTION 21:

How many quarters are there is $18 \frac{1}{2}$?

QUESTION 22:

What number is half way between 3532 and 4582?

QUESTION 23:

Sally is 15 years older than Shaun and the sum of their ages is 31 years.
How old is each: both ages needed for the mark.

QUESTION 24:

Shannon picks 3 more mushrooms than Maree, who picks 13 more than Bill.
Bill picks half as many as his mother who picks 20.
How many mushrooms were picked altogether?

QUESTION 25:

There are 150 children at Kaikorai School.

- One tenth have red hair
- One third have blond hair
- One sixth have black hair
- The rest have brown hair

How many students have brown hair?