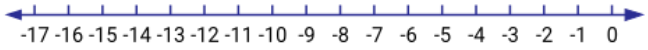
# Year 8 Class 1-4 questions

Q1

Use the number line to help answer.

$-17 + 17 =$ ☐




Q2

$7 - (-8) =$ ☐

Q3

$25 - 3 \times (2 + 6) =$ ☐

Q4

$6 \times (3^2 - 5) =$ ☐

Q5

$16 + 14 \div -2 \times (7 - -1) =$ ☐

Q6

Arrange in ascending order.

☐ ☐ ☐ ☐

0.98 0.45 $\frac{1}{2}$ 0.109

Q7

Round off 87.1126 to 3 decimal places.

87.1126 = ☐ (3 d.p.)

Q8

$115 - -3 \times -9 =$ ☐

Q9

$\frac{897 \div 39 \times 2}{299 \div 13} =$ ☐

Q10

$\sqrt{8.1 \times 0.1} =$ ☐

Q11

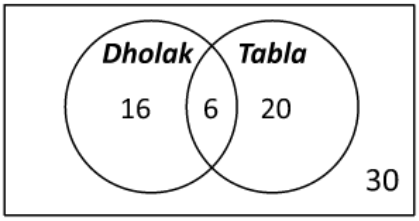
$-8 + (-7) =$ ☐

Q12

$[7 \times -2 + -1] \div -3 =$ ☐

Q13

Mr Krishna's music students were asked what instruments they play.




How many of those who play tabla also play Dholak? ☐

What percentage of those who play Dholak also play tabla? ☐ % (1 d.p.)

Find the probability a student chosen at random plays both Dholak and tabla?

$\frac{\square}{\square}$

Q14

32 students are in a class. 18 own a cat, 8 own both a dog and a cat and there are 5 who own neither. Complete the table.

| | Dog | No dog | Total |
|---|---|---|---|
| Cat | 8 | | |
| No Cat | | 5 | |
| Total | | | 32 |

How many own a dog? ☐

What percentage of cat owners also own a dog? ☐ % (1 d.p.)

Q15

Three cards labelled 1, 2 and 3 are placed in a hat. Two cards are drawn out one at a time and placed next to each other to form a two digit number.

What is the probability that the number formed is 12?

$\frac{\square}{\square}$

What is the probability that the number formed contains a 3?

$\frac{\square}{\square}$

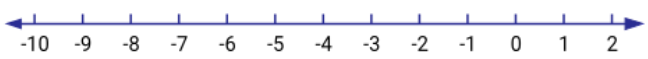
What is the probability that the number formed is even?

$\frac{\square}{\square}$

Q16

Use the number line to help answer.

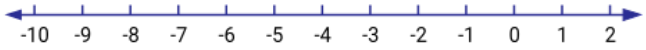
$-3-5=$ ☐




Q17

Use the number line to help answer.

$-3-7=$ ☐




Q18

$-6+(-10)=$ ☐

Q19

$-8+(-20)=$ ☐

Q20

$\frac{38-18}{2\times6\div3}=$ ☐

Q21

$2\times\{18\div(7-4)\}=$ ☐

Q22

$[2^3+4^2]\div(9-3)=$ ☐

Q23

$[(11-5)\times2]^2-6=$ ☐

Q24

Fill in the missing number that makes this number sentence correct.

$-6-(\square\times-2)=-12$

Q25

Fill in the missing number that makes this number sentence correct.

$(-12-\square)\div-3=3$

Q26

Arrange in ascending order.

[ ] [ ] [ ] [ ]

0.952 1.1 $1\frac{3}{5}$ 1.75

Q27

Arrange in ascending order.

[ ] [ ] [ ] [ ]

$1\frac{7}{10}$ 1.2 1.864 $1\frac{1}{4}$

Q28

Round off 17.663 to the nearest whole number.

17.663 = [ ]
(nearest whole no.)

Q29

Round off 88.1126 to the nearest hundredth.

88.1126 = [ ]
(nearest hundredth)

Q30

$(-12 + -6) \times -16 =$ [ ]

Q31

$(26 + -13) \times 4 \div (6 + -4) =$ [ ]

Q32

$\frac{38.5 + (2.6 - 1.3)}{(842 - 36) \times 0.1} =$ [ ] (1 d.p.)

Q33

$\frac{(26.8 + 13.3) \div (3.1 + 2)}{14.7 \times 0.5} =$ [ ] (1 d.p.)

Q34

$\left(\frac{178 \div 8}{1.8 + 0.7}\right)^2 =$ [ ]

Q35

$16^2 - 4 \times 8 =$ [ ]

Q36

$-12 + (-15) =$ [ ]

Q37

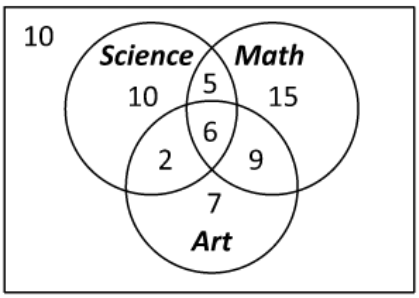
Find the missing number that makes this number sentence correct.

$-5 -$ [ ] $\times 3 = -2$

-1 1 -3 -2

Q38

Student in class were asked which subject they like.




How many like both Science and Mathematics? [ ]

What percentage like all three subjects?

[ ] % (1 d.p.)

How many like both Art and Science but not Mathematics?

[ ]

Q39

A travel company offers 15 tours. 9 of the tours include mountain climbing, 7 include diving and 5 tours include both mountain climbing and diving. Complete the table.

| | Mountain Climbing | No Mountain Climbing | Total |
|---|---|---|---|
| Diving | | | |
| No Diving | | | |
| Total | | | |

How many tours include mountain climbing but not diving?

What percentage of the diving tours also include mountain climbing?

% (1 d.p.)

Q40

A box contains two pink cricket balls and one red cricket ball. Isaac is given one ball from the box which he keeps and then Ryder is given a second ball.

What is the probability that they are both given a pink ball?

What is the probability that Isaac is given a red ball and Ryder is given a pink ball?

If this process is repeated 30 times, how many times would you expect them both to be given different coloured balls?