

Test Time: 60 minutes

First Name

Class

.....

.....

Last Name


Date

.....

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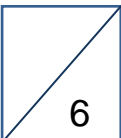
School


.....


Number  17

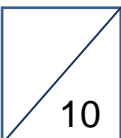
Algebra  4

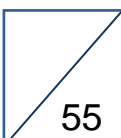
Measurement  10

Geometry  6

Statistics  4

Probability  4

Proficiency  10

Written  55

Mental  20

* See Guidelines

TEST Y6 NUMBER AND ALGEBRA

1. "John said: "Triangular numbers can be found using this sequence:
1, 1+2, 1+2+3, 1+2+3+4..."

True
False

Is John's statement True or False? Tick your answer.

2. Find the answer.

$$35 \times 3.4 = \boxed{}$$

3. Alan buys 3 kg of bananas and 0.750 kg packet of fish.

bananas @ \$3.90 per kilo fish @ \$14.00 per kilo

How much does Alan pay for his purchases?

4. David paid \$789 for a dining table, 4 matching chairs and a cushion for each chair. The table cost \$375 and the four cushions cost \$88.

What was the cost for *each* of the 4 chairs?

5. A boat has a fuel tank capacity of 200 L. The boat owner likes to refill for safety reasons when he still has $\frac{1}{4}$ of fuel left in his tank.

How much fuel is left in the tank when he refills it?

6. What is the difference between $\frac{1}{4}$ and $\frac{1}{8}$?

7. Helen paid \$101.40 for 6 movie tickets.

What is the cost of one movie ticket?

8. A fish pond contains 56 goldfish. $\frac{3}{4}$ of the fish are gold and the remainder are black.

How many fish are black?

TEST Y6 NUMBER AND ALGEBRA

9. Mangoes cost \$3.60 each. Gay bought 7 mangoes and a box of strawberries for \$30.

What was the cost of the strawberries?

\$4.60

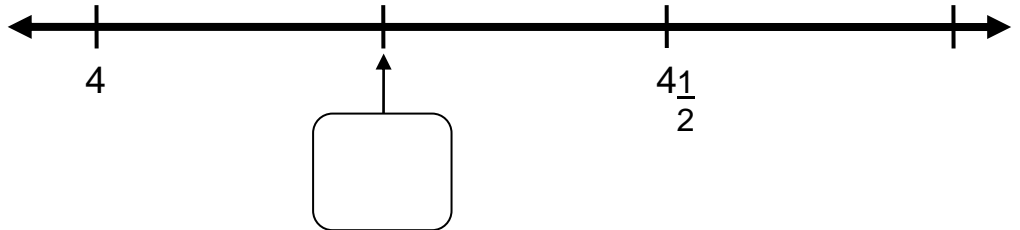
\$4.80

Tick your answer.

\$5.80

\$6.80

10. What is the *mixed numeral* at the arrowed point on the number line?



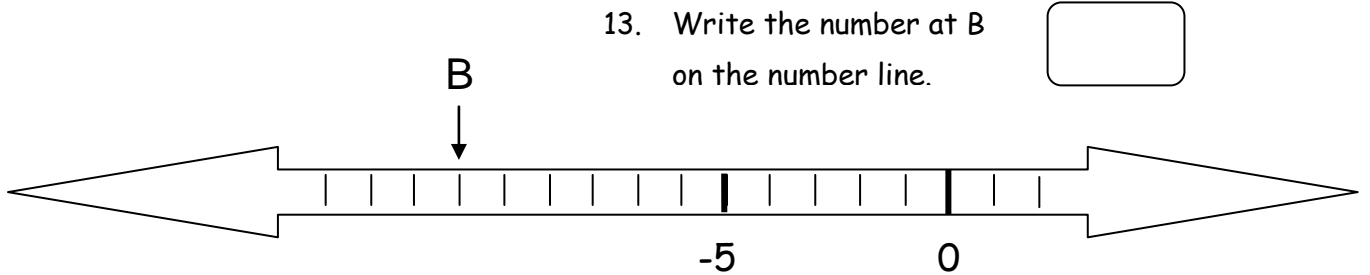
11. Find the answer.

$9.08 + 6.7 + 42 + 0.095 =$

12. Find the answer.

$0.5 \times 10^3 =$

13. Write the number at B on the number line.



14. Find the answer.

$15 \times 10^2 \div 3 =$

15. When Sam bought a bike it was on sale.

The cost price was \$790 but Sam was able to get 10% off the cost price.

\$780

\$7900

How much did Sam pay for the bike?

\$711

\$869

Tick your answer.

16. What percentage is 25 cm of 1 m?

Tick your answer

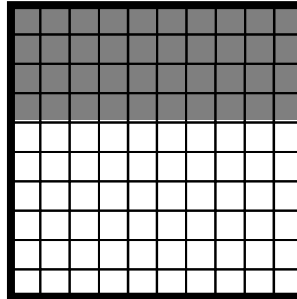
10%

20%

75%

25%

17. Write a fraction, decimal and percent to describe the fraction of small squares inside the large square that are shaded.



fraction

decimal

percent

18. Find a whole number to satisfy the equation.

$$24 \div 3 \div (2 + 2) = n$$

$$n = \text{[]}$$

19. Find a whole number to satisfy the equation.

$$(15 + 5 \div 5) \div n = 4$$

$$n = \text{[]}$$

20. Finish the rule for this sequence of number pairs.

m	1	2	3	4	5
n	2	5	8	11	14

Rule

21. Which one of these number sentences is another way of working out 25×40 ?

Tick your answer.

$$2 \times 20 \times (5 + 20)$$

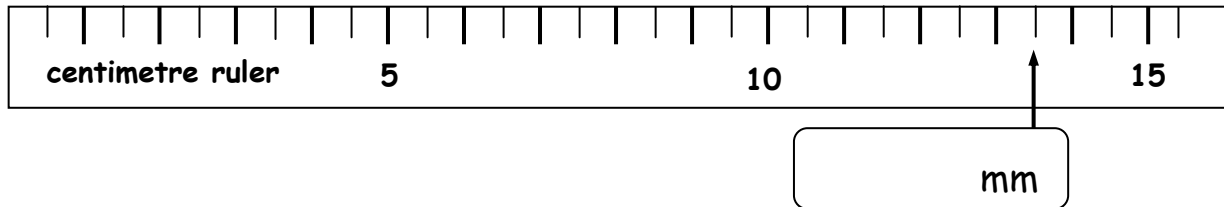
$$40 \times 5 \times 40 \times 20$$

$$40 \times (5 + 40) \times 20$$

$$40 \times 20 + 5$$

22. A train timetable has the next train arriving at my station at 12:50 pm.
 The train waits at the platform for 15 minutes before departing.
 The current time is 11:56 am.
 How long before the train departs the station?

23. Write the measure at the arrowed point in millimetres.



24. Which of these is the equivalent of one half of a kilogram?

	5 g	50 g	500 g	5 000 g
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Which metric unit is a measure of all space inside a room?

	kg	L	m ³	m ²
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

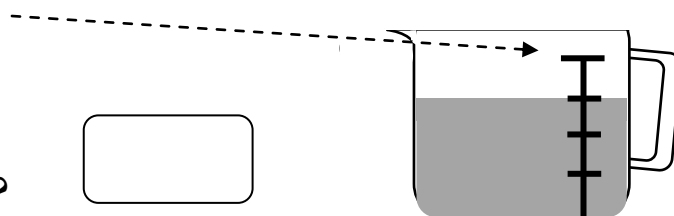
26. Which of these is the longest distance?

	1 500 m	0.999 km	999 m	1 km
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. An average tomato has a mass of about 100 g.
 An average tomato contains 95 mL of water.
 If all the water is removed from an average tomato, what would its mass be?

g

28. This jug holds 2 L of water at the top mark.
 How many litres of water are showing in the container?



29. Draw two diagrams of two *different* rectangular shapes that each has an area of 24 cm^2
 Label the dimensions for each of your rectangular shapes.

30. What is the perimeter of a rectangular plot of land where the short sides are one fifth the length of the long sides?

The area of the land is 80 m^2 .

31. The current time on my clock shows 11:10am.

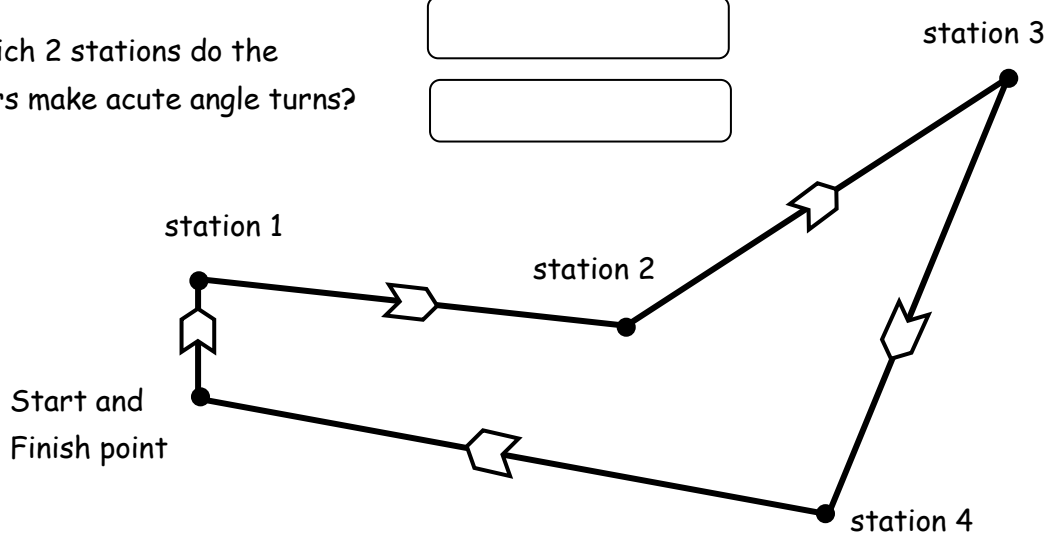
My flight departure time on the ticket is in 24 hour time and reads as 17:05

How long is it before my flight leaves?

32. This is a map of a running course.

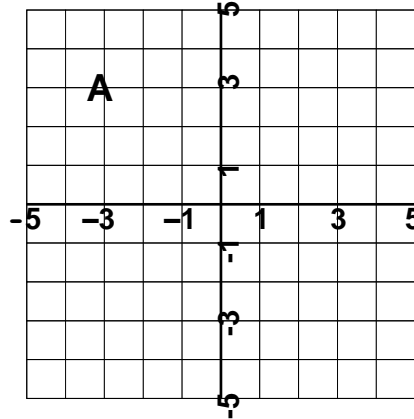
There are 4 drink stations.

At which 2 stations do the runners make acute angle turns?

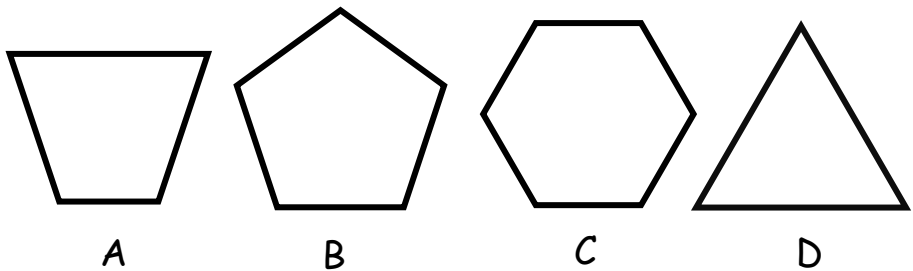


33. Which of these grid locations describes the position for **A**.

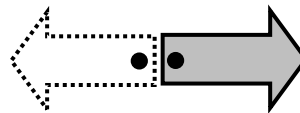
- (-3, 3)
- (3, 3)
- (-3, -3)
- (3, -3)



34. Tick the shape that contains 2 obtuse internal angles.

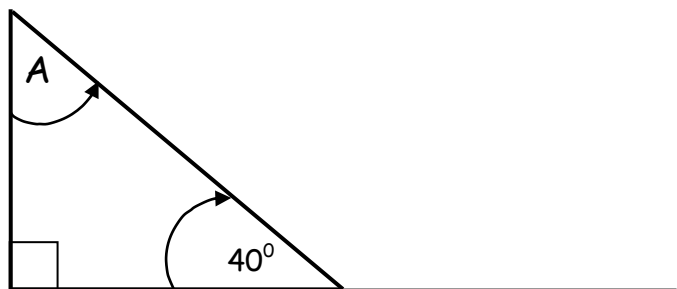


35. How many degrees of clockwise turn has the dotted arrow undergone to move to the orientation of the grey arrow?

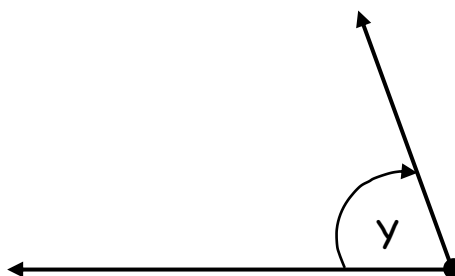


Rotation

36. What is the size of angle A?



37. Use your protractor to measure angle Y.



38. 1 Ace, 1 King, 1 Queen and 1 Jack card are placed face down on a desk:

If you turn over 2 cards, how many different combinations might occur? Tick your selection.

5	3	6	4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

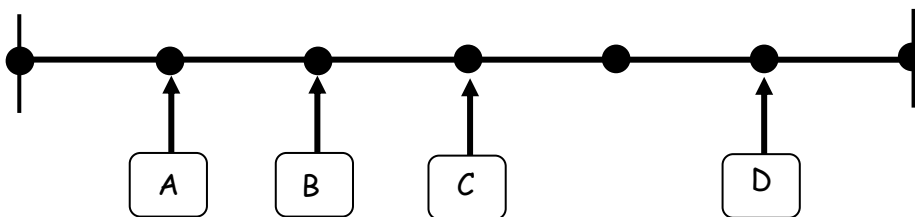
39. 1 Ace, 1 King, 1 Queen and 1 Jack cards are placed face down on a desk:

If you select one card, what are the chances of you turning over an Ace? Tick your selection.

$\frac{1}{4}$	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{1}{5}$
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

40. Sarah rolls a special 6-sided die containing the numbers 1, 1, 2, 2, 3, 3 on the 6 faces.

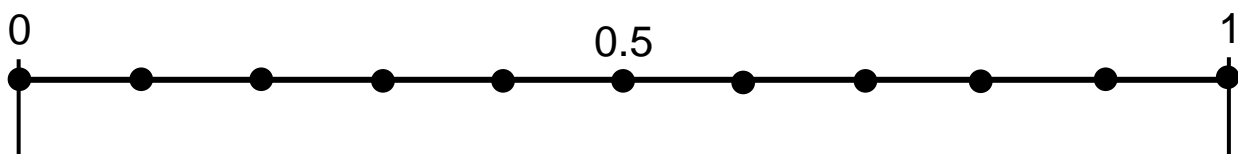
Tick the point on the number line that shows the chance of Isabel rolling a 3.



41. Anna has 6 red, 3 yellow and 1 blue counters in a bag.

Anna takes half of the counters from the bag without looking.

Circle the point that describes the probability of Anna taking a red counter from the bag.



42. Use lines to link the data collection activity with the best way to record the data.

A Data collected on a family's ancestry

Bar graph

B Data collected on the colour of cars sold.

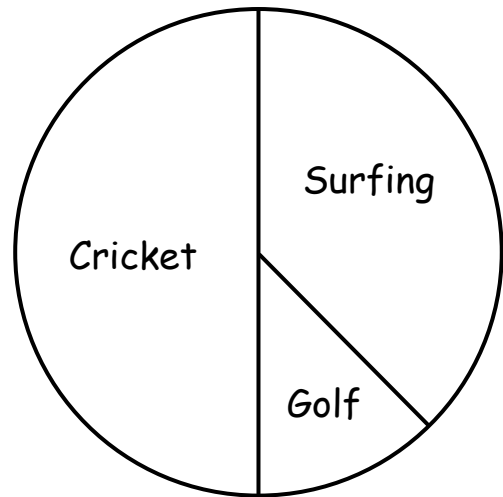
Table tally

C Data collected to record laps completed in a student fun-run.

Tree diagram

43. The pie chart shows the portion of time Peter spent watching sport on TV one Saturday.

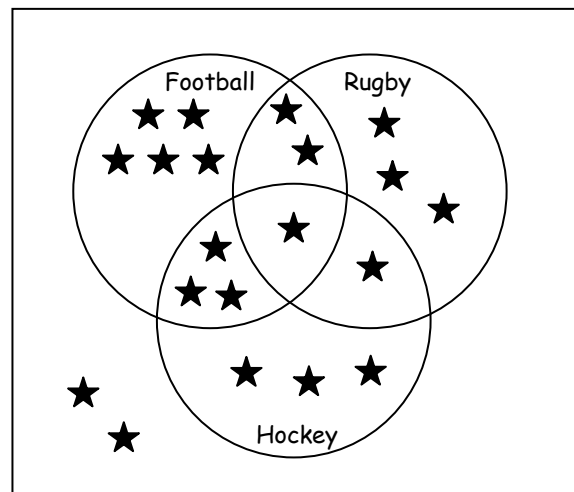
If Peter spent 45 minutes watching surfing, how many hours of sport did he watch overall?



44. A group of 20 boys were asked to record the sport they had played in winter.

How many of the statements below are true?

- (1) Six boys played 2 sports.
- (2) One boy played 3 sports
- (3) 18 boys played sport in winter.



45. In a cricket match, the runs scored each over by Batter A and Batter B are shown on a TV screen graphic at the end of each over.

Which Batter has the higher score after 7 overs?

Key

Batter A

Batter B

