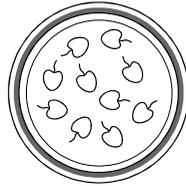# Fractions, Decimals and Percentages KS2 SATS Standard Worksheet

1. Jack ate **half** the cherries on the plate.

These are the cherries that were **left**.
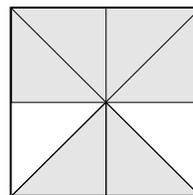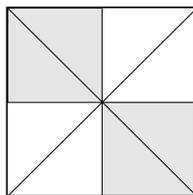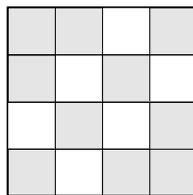

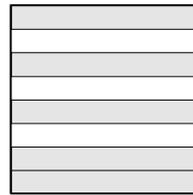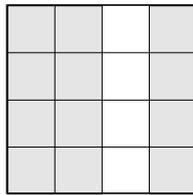How many cherries were on Jack's plate **before** he ate half of them?
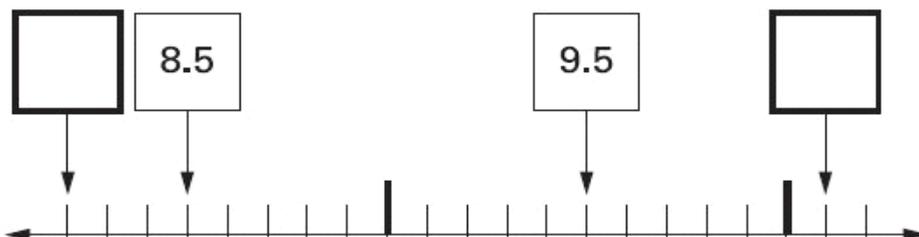
cherries

1 mark

2. Tick (✔) the **two** shapes that have **three-quarters** shaded.

1 mark

3. Here is part of a number line.

Write in the numbers missing from the **two** empty boxes.

8.5   9.5

2 marks

4.

Tom and Nadia have 16 cards each.

Tom gives Nadia 12 of his cards.

How many cards do Tom and Nadia each have now?

Tom ☐   **Nadia** ☐
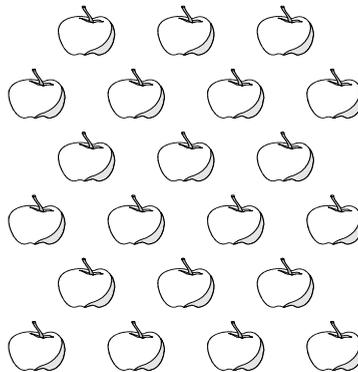
1 mark

Lucy also has 16 cards.

She gives a quarter of her cards to Kiran.

How many cards does Lucy give to Kiran?
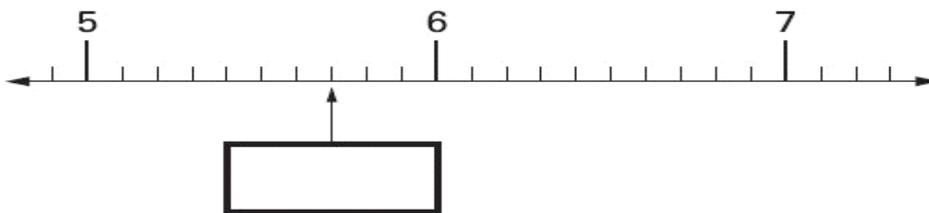
☐

1 mark

5.   Here are 21 apples.

Put a ring around **one third** of them.

1 mark

6.   Here is part of a number line.

Write the **missing** number in the box.

1 mark

7.   Shade **one third** of this shape.

1 mark

3
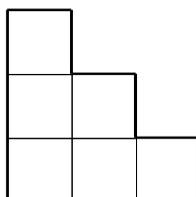
Shade **one quarter** of this shape.
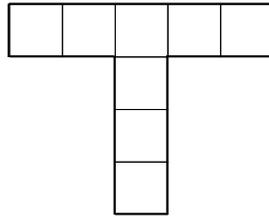
8. Tick (✔) **two** cards that give a **total of 5**

$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$
$3\frac{1}{2}$	$3\frac{3}{4}$	$4\frac{1}{4}$
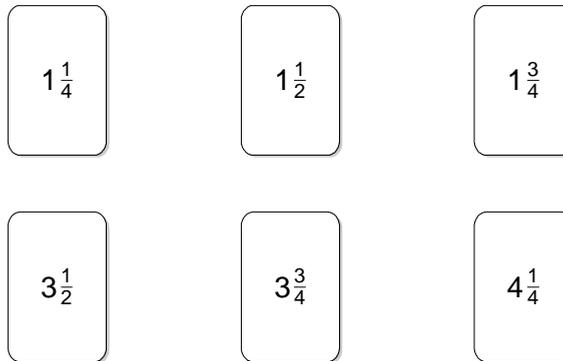
9. Write the **two** missing numbers in this sequence.

$\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ 1   ⬜ $1\frac{1}{2}$ ⬜   2

10. Meg has 20 pet stickers to go on this page.
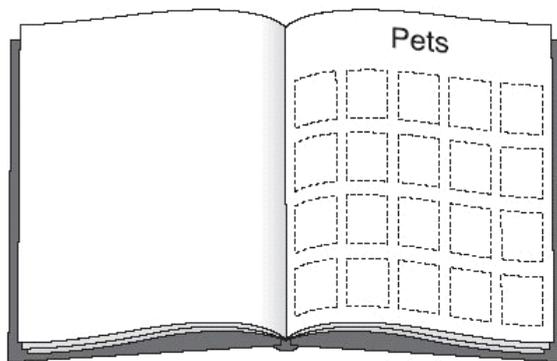
$\frac{1}{4}$ of them are dog stickers.

$\frac{1}{2}$ of them are cat stickers.

The rest are rabbit stickers.

How many rabbit stickers does she have?

stickers

11. Circle the **two** fractions that are **greater than** $\frac{1}{2}$

$\frac{1}{8}$ $\qquad$ $\frac{6}{10}$ $\qquad$ $\frac{5}{8}$ $\qquad$ $\frac{3}{10}$

1 mark

12. Here is a square.
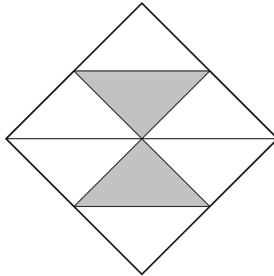
What fraction of the square is shaded?

1 mark

13. Circle the **two** fractions that have the same value.

$\frac{2}{10}$ $\qquad$ $\frac{1}{3}$ $\qquad$ $\frac{1}{2}$
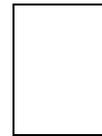
$\frac{5}{10}$ $\qquad$ $\frac{1}{4}$

1 mark

14. Draw an arrow (↓) on the number line to show $1\frac{3}{4}$

1 mark

15. Shade $\frac{1}{4}$ of this shape.

1 mark

5
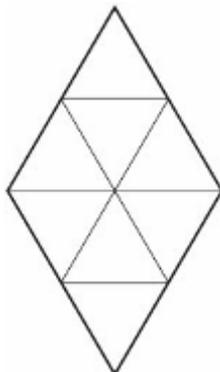
16. John had £5

He gave 25% of it to charity.

How much did he give?

£ _____

1 mark

17. Tick (✔) the **two** numbers which have a total of **10**

| 0.01 | 0.11 | 1.01 |

| 9.09 | 9.9 | 9.99 |

1 mark

18. Write in the **missing** number on this number line.

| _____ | 10 | 10.2 | 10.4 |
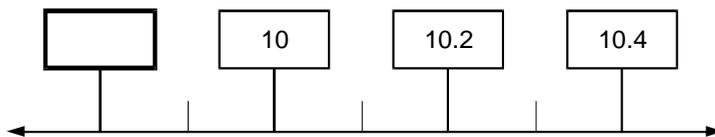
1 mark

19. A larger bottle of juice will hold **30% more** than this bottle.

JUICE
500ml

How much will the larger bottle hold?

_____ **ml**

1 mark

20. Match each box to the number which has the same value.

One has been done for you.

$\frac{3}{4}$ 0.5

              0.8

$\frac{1}{2}$ 0.3

              0.75

$\frac{4}{5}$

              0.4   1 mark

6
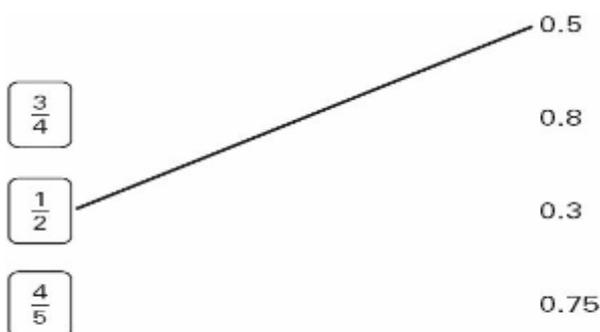
21. Calculate **60%** of **765**.

1 mark

22. Draw **one** line to join **two fractions** which have the **same value**.

$$\frac{4}{7}$$

$$\frac{1}{2}$$

$$\frac{2}{8}$$

$$\frac{2}{5}$$

$$\frac{1}{3}$$

$$\frac{1}{4}$$

1 mark

23. Circle **two** numbers which **add** to make **0.12**

0.1   0.5   0.05   0.7   0.07   0.2

1 mark

24. Write in the missing numbers.

One has been done for you.

rounded to the nearest whole number is →

6.01 ⟶ 6

9.51 ⟶ [ ]

7.75 ⟶ [ ]

1 mark

25. Here is a grid made of squares.

Shade **10%** of this grid.

26. Write the **same** number in each box to make this correct.

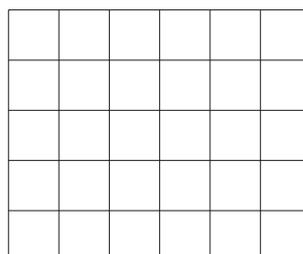$$\boxed{} + \boxed{} + \boxed{} = 10.5$$

1 mark

27. Calculate $\dfrac{3}{4}$ of **840**

$\boxed{}$

1 mark

28. Circle the **two** fractions that are equivalent to **0.6**

$$\dfrac{6}{10} \qquad \dfrac{1}{60} \qquad \dfrac{60}{100} \qquad \dfrac{1}{6}$$

1 mark

29. Put a tick (✔) in **each row** to complete this table.

One has been done for you.

	greater than $\dfrac{1}{2}$	less than $\dfrac{1}{2}$
0.9	✔	
0.06		
$\dfrac{11}{20}$		
0.21		

2 marks

30. Here is a chocolate bar.
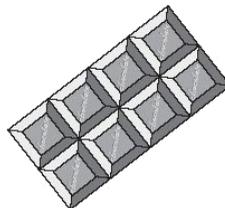
William eats 3 pieces and Amber eats 2 pieces.

What **fraction** of the chocolate bar **remains**?

$\boxed{}$

9

1 mark

31. Match each box to the correct number.

One has been done for you.

45

40

$\frac{1}{2}$ of 30

35

$\frac{1}{3}$ of 75

30

25

$\frac{1}{5}$ of 150

20

15
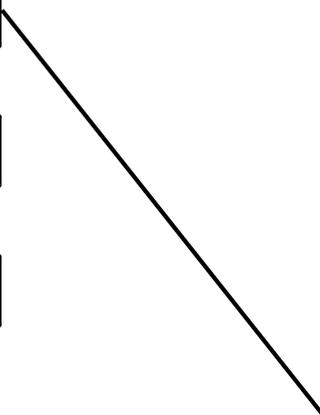
1 mark

32. Karen makes a fraction using two number cards.

? ?
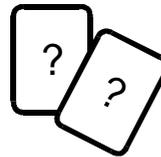
She says,

'My fraction is equivalent to $\frac{1}{2}$
One of the number cards is 6'

What could Karen's fraction be?

Give both possible answers.

✎ ☐/☐ or ☐/☐

2 marks

33. Here is part of a number line.

Write in the two missing numbers.
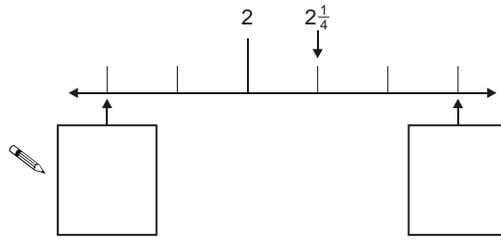
2 marks

34. The diagram is made of squares.

What fraction of the diagram is shaded?
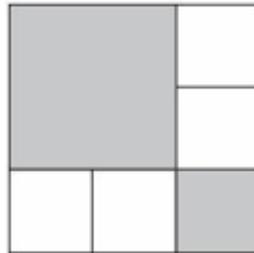
1 mark

35. Calculate $\frac{1}{5}$ of **325**

1 mark

36. Write these fractions in order of size starting with the smallest.

$$\frac{3}{4} \qquad \frac{3}{5} \qquad \frac{9}{10} \qquad \frac{17}{20}$$
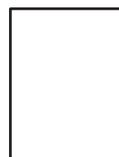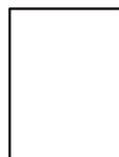
smallest

1 mark

37. Write these numbers in order.

One has been done for you.

3.03   3.23

3.3

3   3.2

largest

3   smallest

1 mark

38. Write in the missing numbers.

30% of 60 is [ ]

1 mark

30% of [ ] is 60

1 mark

39. Calculate **31.6 × 7**

[ ]

1 mark

40. Here is a flag.

125 cm

60 cm
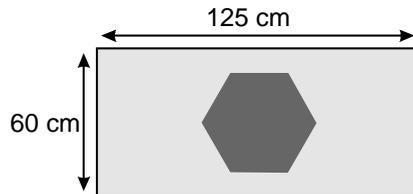
What is the **area** of **this flag**?

[cm²]

2 marks

20% of the flag is blue.

What **area** of the flag is **blue**?

$$\boxed{\qquad\qquad \boxed{\qquad} \text{ cm}^2}$$
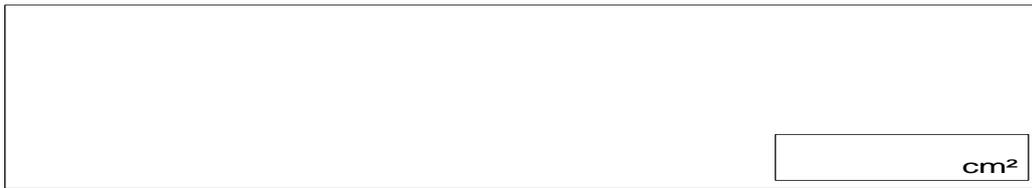
2 marks

41. Complete these fractions to make each equivalent to $\dfrac{3}{5}$

$$\dfrac{\boxed{}}{10} \qquad\qquad \dfrac{\boxed{}}{15}$$

$$\dfrac{12}{\boxed{}}$$

1 mark

42. Calculate **15%** of **460**

$$\boxed{}$$

1 mark

43. Here are some number cards.

7   5   9   3   11

Use **two** of the cards to make a fraction which is **less than** $\dfrac{1}{2}$.

$$\dfrac{\boxed{}}{\boxed{}}$$

1 mark

How much **less than 1** is your fraction?

....

1 mark

44. Calculate **5%** of **£3600**

£ $\boxed{}$

1 mark

45. There are 24 coloured cubes in a box.

Three-quarters of the cubes are red,

four of the cubes are blue

and the rest are green.

How many **green** cubes are in the box?

Show your **method.** You may get a mark.

2 marks

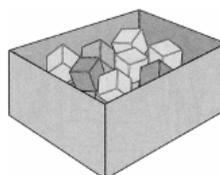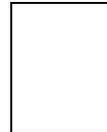One more **blue** cube is put into the box.

What fraction of the cubes in the box are **blue** now?

1 mark

46. Which is larger, $\dfrac{1}{3}$ or $\dfrac{2}{5}$?
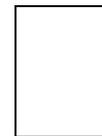
Explain how you know.

....

....

1 mark

47. The Year 6 children in a school were asked to choose a musical instrument. This is a pie chart of their choices.

Keyboard

Drum

Trumpet

Guitar

Recorder

Violin

Estimate what **fraction** of the children chose a **drum.**

1 mark

There are **80** children in Year 6.

Estimate the number of children who chose a **violin**.

1 mark

Explain how you decided.

....
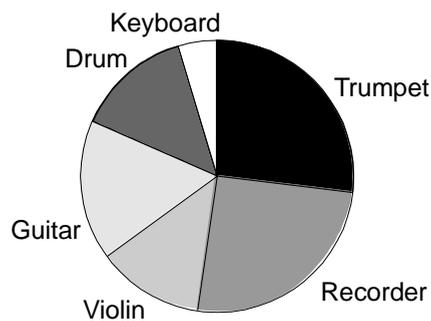
....

1 mark

15% of the 80 children chose a **guitar.**

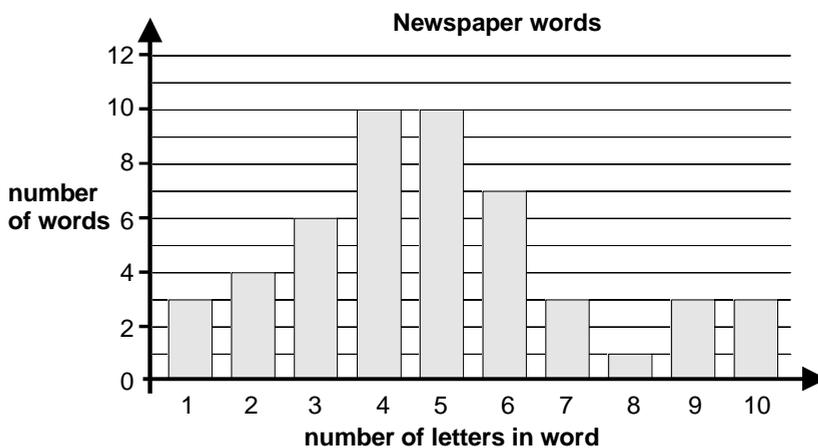How many children is this?

2 marks

48. Calculate $\dfrac{3}{8}$ of **980**

1 mark

49. Kelly chooses a **section** of a newspaper.

It has **50 words** in it.

She draws a bar chart of the number of letters in each word.

Newspaper words

What **fraction** of the 50 words have **more than 6 letters**?

1 mark

Kelly says,

23 of the 50 words have less than 5 letters.
This shows that nearly half of all the words used in the newspaper have
less than 5 letters in them.

Explain why she **could be wrong.**

....

....

1 mark

50. Calculate of $\dfrac{5}{12}$ of **378**

1 mark

51.

250 000 people visited a theme park in one year.

15% of the people visited in April and

40% of the people visited in August.

How many people visited the park in the rest of the year?

Show your **method.** You may get a mark.

2 marks

52. Calculate **24%** of **525**

1 mark