

Starter test 2 - Answers

$$(30) \quad \text{spent} = £10 - £2.40 = £7.60$$

$$\begin{array}{r} 10.00 \\ - 2.40 \\ \hline 7.60 \end{array}$$

$$\text{notebook} + 2 \text{ highlighters} = £7.60$$

$$£2.20 + 2 \text{ highlighters} = £7.60$$

$$2 \text{ highlighters} = £7.60 - £2.20 = £5.40$$

$$\begin{array}{r} £ 7.60 \\ £ 2.20 \\ \hline 5.40 \end{array}$$

$$2 \text{ highlighters} = £5.40$$

$$1 \text{ highlighter} = £5.40 \div 2 = £2.70$$

$$\begin{array}{r} 2.70 \\ 2 \overline{) 5.40} \end{array}$$

Answer: £2.70

(31)

$$\begin{array}{l} ? \\ -3 \\ \times 2 \\ +4 \\ = 18 \end{array}$$

$$\begin{array}{l} ? \\ +3 \\ \div 2 \\ -4 \\ = 18 \end{array}$$

10

$$(7 + 3 = 10)$$

$$(14 \div 2 = 7)$$

$$(18 - 4 = 14)$$

do the opposite (inverse) to find what he started with

Answer: 10

32) Factors of 32

numbers you can multiply together to make 32
• it is easiest to write factors in pairs

Answer

1 32 (because $1 \times 32 = 32$)

2 16 (because $2 \times 16 = 32$)

4 8 (because $4 \times 8 = 32$)

33)

1kg = 1000g

flour wanted - flour already there = flour needed

1000g - 156g = 844g (Answer)

$$\begin{array}{r} \overset{0}{1} \overset{0}{0} \overset{0}{0} \\ \times 10 \\ \hline 1000 \\ - 156 \\ \hline 844 \end{array}$$

34)

170 - _____ = 150 + _____

Difference between 170 and 150 is 20 so the 2 numbers you choose have to add to 20

There are lots of possible answers. You could have:

- | | |
|---------------------|--------------------|
| 170 - 19 = 150 + 1 | 170 - 6 = 150 + 16 |
| 170 - 18 = 150 + 2 | 170 - 5 = 150 + 15 |
| 170 - 17 = 150 + 3 | 170 - 4 = 150 + 14 |
| 170 - 16 = 150 + 4 | 170 - 3 = 150 + 13 |
| 170 - 15 = 150 + 5 | 170 - 2 = 150 + 12 |
| 170 - 14 = 150 + 6 | 170 - 1 = 150 + 11 |
| 170 - 13 = 150 + 7 | 170 - 0 = 150 + 10 |
| 170 - 12 = 150 + 8 | 170 - 20 = 150 + 0 |
| 170 - 11 = 150 + 9 | |
| 170 - 10 = 150 + 10 | |
| 170 - 9 = 150 + 11 | |
| 170 - 8 = 150 + 12 | |
| 170 - 7 = 150 + 13 | |

You can have any of these answers

(35) £ 3.15 x P = £ 12.60

Weeks : money

1 : £ 3.15

2 : £ 6.30 (3.15 + 3.15)

3 : £ 9.45 (3.15 x 3)

(4) : £ 12.60 (3.15 x 4)

Answer : 4 weeks

(36)

1	2	3	4	5
1	2	3	4	5

10 squares

$\frac{1}{5}$ of 10 = 2 ... shade any 2 squares

shade 1 in every 5 squares

(37)

$$\begin{array}{r} \\ 5 2 3 4 \\ + 4 3 7 6 \\ \hline 9 6 1 0 \end{array}$$

Answer 9 6 1 0

(38)

prime number = number greater than 1 that can't be divided evenly by any number apart from itself and 1

(3) 25

(31) 1 42

51

(67) 75

(39) a)

33 ÷ 10 = 3.3

move every digit 1 space to make the number smaller.

H T O . t h

3 3 .



3.3

$$b) 130 \div 100 = 1.3$$

H T O . t h

1 3 0

1.3

each digit moved 2 spaces so it must be 100

Answer: 100

$$c) \underline{33} \div 100 = 0.33$$

do the inverse $0.33 \times 100 = \underline{33}$

↑
move 2 spaces

H T O . t h

0.33

33.0

Answer: 33

40

$$a) 3^3 = 3 \times 3 \times 3$$
$$= \underbrace{3 \times 3}_9 \times 3$$
$$= 27$$

Answer: 27

$$b) 12^2 = 12 \times 12$$
$$= 144$$

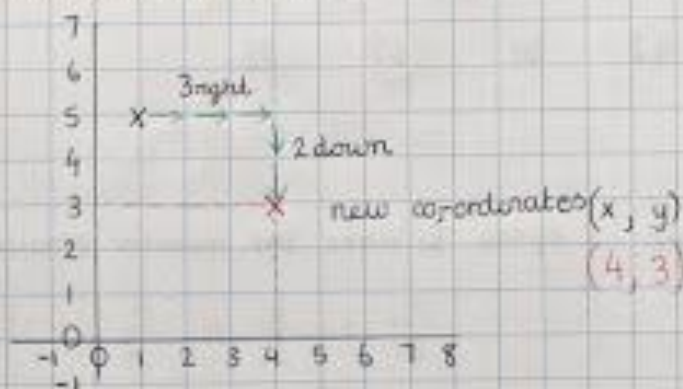
Answer: 144

$$c) 4^3 = \underbrace{4 \times 4}_16 \times 4$$
$$= 64$$

Answer: 64

41

translated = moved.



42) product = multiply

$$\begin{array}{r} 35 \\ \times 7 \\ \hline 245 \\ 23 \end{array}$$

Answer 245

43) a)

$$36 \text{ cm} = \overset{\times 10}{\underline{360}} \text{ mm}$$
$$1 \text{ cm} = \overset{\times 10}{\underline{10}} \text{ mm}$$

$$\begin{array}{r} \text{H T O} \\ 36 \\ \times 10 \\ \hline 360 \end{array}$$

Answer 360 mm

b)

$$1060 \text{ g} = \overset{+1000}{\underline{1.060}} \text{ kg}$$
$$1000 \text{ g} = \underset{-1000}{\underline{1}} \text{ kg}$$

$$\begin{array}{r} \text{Th H T O. t h} \\ 1060 \\ \hline 1.060 \end{array}$$

decimal point DOESN'T move!

Answer 1.060 kg

c)

$$3.5 \text{ km} = \overset{\times 1000}{\underline{3500}} \text{ m}$$
$$1 \text{ km} = \overset{\times 1000}{\underline{1000}} \text{ m}$$

$$\begin{array}{r} \text{Th H T O. t h} \\ 3.5 \\ \hline 3500 \end{array}$$

Answer 3500 m

d)

$$1.45 \text{ m} = \overset{\times 100}{\underline{145}} \text{ cm}$$
$$1 \text{ m} = \overset{\times 100}{\underline{100}} \text{ cm}$$

$$\begin{array}{r} \text{Th H T O. t h} \\ 1.45 \\ \hline 1450 \end{array}$$

Answer 145 cm

44)

$$\frac{5}{16} + \frac{3}{16} + \frac{7}{16} = \frac{15}{16}$$

← add the numerators 5+3+7

← denominator stays the same

45) a) $\frac{3}{8} = \frac{9}{24}$

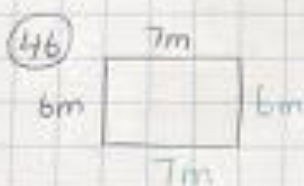
(Arrows show 3 multiplied by 3 to get 9, and 8 multiplied by 3 to get 24)

b) $\frac{9}{15} = \frac{3}{5}$

(Arrows show 9 divided by 3 to get 3, and 15 divided by 3 to get 5)

c) $\frac{8}{12} = \frac{2}{3}$

(Arrows show 8 divided by 4 to get 2, and 12 divided by 4 to get 3)



Rectangle - opposite sides are equal length

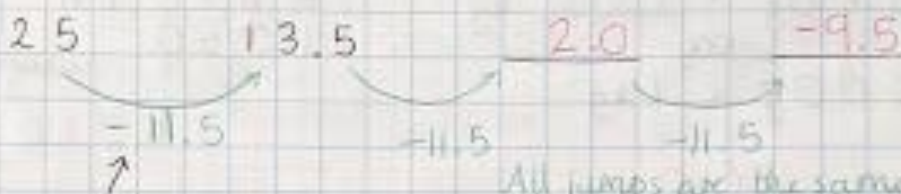
Perimeter = distance all the way round the edge

$$= 7 + 6 + 7 + 6$$

Answer

$$= 26m$$

47)

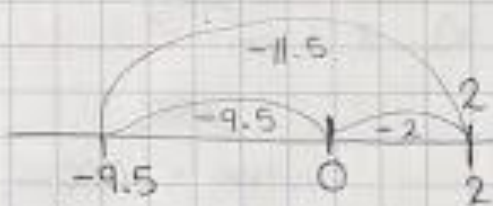


All jumps are the same

find the gap/difference

$$\begin{array}{r} 2.5 \\ - 13.5 \\ \hline 11.5 \end{array}$$

$$\begin{array}{r} 13.5 \\ - 11.5 \\ \hline 2.0 \end{array}$$



48)

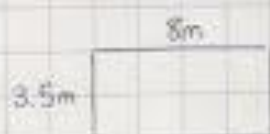
Price for 1 hour \times hours paid for = cost

$$£ 8.75 \quad \times \quad 8 \quad = \quad £ 70.00$$

$$\begin{array}{r} £ 8.75 \\ \times \quad 8 \\ \hline 70.00 \\ 764 \end{array}$$

Answer = £ 70.00

49



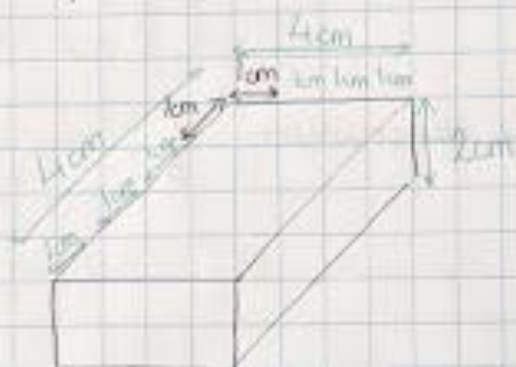
$$\text{area} = \text{length} \times \text{width}$$

$$= 8\text{m} \times 3.5\text{m} = 28\text{m}^2$$

$$\begin{array}{r} 3.5 \\ \times 8 \\ \hline 28.0 \\ \hline \end{array}$$

Answer 28m^2

50



$$\text{Volume} = \text{length} \times \text{width} \times \text{height}$$

$$= 4\text{cm} \times 4\text{cm} \times 2\text{cm}$$

$$= \underbrace{16\text{cm}^2} \times 2\text{cm}$$

$$= 32\text{cm}^3$$

Answer = 32cm^3

51

Angles in a triangle = 180°

$$123^\circ + 32^\circ + 25^\circ = 180^\circ$$

$$180 - \underbrace{32 - 25}_{57} = 123^\circ$$

$$180 - 57 = 123^\circ \quad \text{Answer } 123^\circ$$

$$\begin{array}{r} 180 \\ - 57 \\ \hline 123 \end{array}$$

52



$$8 + 6 = 14$$

$$14^\circ\text{C}$$

\therefore dropped by 14°C

Answer 14°C

53

$$\begin{array}{r} | \quad 4 \leftarrow \text{numerator} \\ \hline 5 \leftarrow \text{denominator} \end{array}$$

↑
whole number

Whole \times denominator

$$1 \times 5 = 5$$

add numerator :

$$5 + 4 = 9$$

Put over the original denominator $\frac{9}{5}$