

Assessment Test 5: Measures

Name:

Addition [see Worksheet 28]

Totals

Give your answers in metres.

- | | | |
|-------------------------------------|--|---|
| 1 4 m 30 cm + 3 m 87 cm | 2 3 km 80 m + 2 km 42 m | |
| 3 7 m 25 cm + 325 cm | 4 1 km 70 m + 327 m | <input style="width: 40px; height: 20px;" type="text"/> |
| 5 3 km 827 m + 2 km 428 m..... | 6 82 cm + 38 cm + 1 m 2 cm | <input style="width: 40px; height: 20px;" type="text"/> |

Subtraction [see Worksheet 29]

Give your answers in centilitres.

- | | | |
|--------------------------------------|--------------------------------------|---|
| 7 2 cl 8 ml + 3 cl 5 ml | 8 4 l 328 ml + 1 l 78 ml | |
| 9 1 l 328 ml + 2 l 68 ml | 10 5 cl 3 ml + 32 ml | <input style="width: 40px; height: 20px;" type="text"/> |
| 11 1 l 7 cl + 2 l 38 cl | 12 2 l 3 cl + 1 l 4 ml | <input style="width: 40px; height: 20px;" type="text"/> |

Multiplication [see Worksheet 30]

- | | | |
|-------------------------------|------------------------------|---|
| 13 2 m 6 cm x 8 | 14 3 km 28 m x 7 | |
| 15 3 kg 273 g x 5 | 16 2 t 38 kg x 9 | <input style="width: 40px; height: 20px;" type="text"/> |
| 17 3 l 73 cl x 4 | 18 2 l 45 ml x 3 | <input style="width: 40px; height: 20px;" type="text"/> |

Division [see Worksheet 31]

Give your answers correct to the nearest metre.

- | | | |
|------------------------------|-------------------------------|--|
| 19 3 km 88 m ÷ 7 | 20 14 km 28 m ÷ 9 | |
|------------------------------|-------------------------------|--|

Give your answers correct to the nearest gram.

- | | | |
|------------------------------|-------------------------------|--|
| 21 8 kg 47 g ÷ 7 | 22 3 kg 385 g ÷ 6 | |
|------------------------------|-------------------------------|--|

Give your answers correct to the nearest millilitre.

- | | | |
|-------------------------------|--------------------------------|---|
| 23 6 l 287 ml ÷ 8 | 24 15 l 326 ml ÷ 7 | <input style="width: 40px; height: 20px;" type="text"/> |
|-------------------------------|--------------------------------|---|

Problems [see Worksheet 32]

- | | |
|---|---|
| 25 A barrel contains 37.52 litres of wine. How many 20 centilitre glasses can be filled from the barrel? | |
| 26 A lorry can carry 7 tonnes 380 kilograms. How many 200 kilogram packing cases can be carried? | |
| 27 A building is 28 m 72 cm tall. A flagstick, height 3 m 36 cm, is put on top. What is the total height of the building and flagstick? | |
| 28 A bath contains 86 litres of water. Six containers, each with a capacity of 820 ml, are filled from the bath. How much water remains in the bath? | |
| 29 A lorry carries 6.8 tonnes of sand. 900 kilograms is removed. How much sand remains in the lorry? | |
| 30 A plank of wood is 5 m 7 cm long. 83 cm is cut off. How much wood is left? | <input style="width: 40px; height: 20px;" type="text"/> |

Final total

Percentages

10% means $\frac{10}{100}$ or $\frac{1}{10}$

We can find $\frac{1}{10}$ by dividing by 10

Example 1 10% of 30

$$\boxed{30 \div 10} = 3$$

Example 2 10% of 28

$$\boxed{28 \div 10} = 2.8$$

Example 3 30% of 60

First find 10% 6
Therefore 30% **18**

Example 4 5% of 40

First find 10% 4
Therefore 5% **2**

Example 5 Increase 50 by 20%

First find 10% 5
Therefore 20% 10
Increase means add
 $50 + 10 = 60$

Example 6 Decrease 70 by 40%

First find 10% 7
Therefore 40% 28
Decrease means subtract
 $70 - 28 = 42$

Measures: Division

Give the answer correct to the nearest millimetre.

1 $16 \text{ cm } 7 \text{ mm} \div 3$

2 $4 \text{ cm } 3 \text{ mm} \div 5$

3 $5 \text{ cm } 8 \text{ mm} \div 8$

4 $3 \text{ m} \div 9$

5 $12 \text{ cm } 3 \text{ mm} \div 4$

6 $8 \text{ cm} \div 7$

Give the answer correct to the nearest centimetre.

7 $3 \text{ m } 18 \text{ cm} \div 7$

8 $2 \text{ m } 6 \text{ cm} \div 6$

9 $2 \text{ m } 23 \text{ cm} \div 5$

10 $4 \text{ m } 82 \text{ cm} \div 3$

11 $3 \text{ m} \div 5$

12 $7 \text{ m} \div 6$

Give the answer correct to the nearest metre.

13 $6 \text{ km } 327 \text{ m} \div 4$

14 $2 \text{ km } 327 \text{ m} \div 3$

15 $8 \text{ k } 43 \text{ m} \div 8$

16 $6 \text{ km } 8 \text{ m} \div 6$

17 $4 \text{ km} \div 6$

18 $27 \text{ km} \div 7$

Give the answer correct to the nearest gram.

19 $2 \text{ kg } 8 \text{ g} \div 3$

20 $4 \text{ kg } 283 \text{ g} \div 7$

21 $3 \text{ kg } 17 \text{ g} \div 7$

22 $6 \text{ kg } 381 \text{ g} \div 4$

23 $5 \text{ kg} \div 3$

24 $2 \text{ kg} \div 7$

Give the answer correct to the nearest kilogram.

25 $4 \text{ t } 271 \text{ kg} \div 4$

26 $3 \text{ t } 871 \text{ kg} \div 3$

27 $3 \text{ t } 17 \text{ kg} \div 8$

28 $6 \text{ t } 38 \text{ kg} \div 7$

29 $21 \text{ t} \div 9$

30 $3 \text{ t} \div 7$

Give the answer correct to the nearest millilitre.

31 $1 \text{ l } 397 \text{ ml} \div 8$

32 $1 \text{ l } 7 \text{ ml} \div 6$

33 $6 \text{ l } 12 \text{ ml} \div 5$

34 $2 \text{ l } 328 \text{ ml} \div 8$

35 $7 \text{ l} \div 6$

36 $3 \text{ l} \div 7$

Give the answer correct to the nearest centilitre.

37 $2 \text{ l } 37 \text{ cl} \div 8$

38 $1 \text{ l } 29 \text{ cl} \div 7$

39 $4 \text{ l } 7 \text{ cl} \div 4$

40 $6 \text{ l } 27 \text{ cl} \div 8$

41 $9 \text{ l} \div 6$

42 $13 \text{ l} \div 3$

Intermediate Level Test

- 1 a Estimate the cost of 403 chairs at £29.95 each.
 b Estimate the value of $\frac{\sqrt{3.99 \times 4.99}}{0.0098}$
- 2 A hall has 32 rows of chairs with 27 chairs in each row.
 a How many chairs are in the hall?
 b If 48 chairs are put in each row, how many rows will be needed?

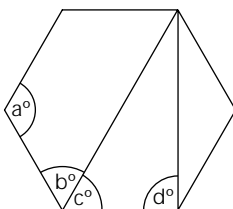
- 3 This is a recipe for soup for six people.
 Complete the recipe for 15 people

Water	ml
Carrots	
Salt	g

Water	1800 ml
Carrots	4
Salt	8 g

- 4 324 pupils out of 600 passed an examination. What was the percentage pass rate?
- 5 What are the next two numbers in this sequence:
 1, 3, 9, 27, 81
- 6 Write 360 as a product of primes.
- 7 $a = -3$ $b = -4$ $c = 12$
 What is the value of:
 a $a + b$
 b $c \div a$
 c $a - -c$
 d abc
- 8 Solve $8x + 5 = 2(2x - 9)$
- 9 Solve the simultaneous equations:
 $3x - 2y = -18$
 $2x - 5y = -23$

- 10 This is a regular hexagon:



What is the size of angles a, b, c and d?