



## Converting Units of Length

### Learning Intention:

#### Students will:

- ✦ *Be able to convert units of length between millimetres (mm), centimetres (cm), metres (m) and kilometres (km)*
- ✦ *Be able to measure the perimeter of a shape just from given measurements*

When measuring and converting length it is important to remember:

$$1\text{cm} = 10\text{ mm}$$

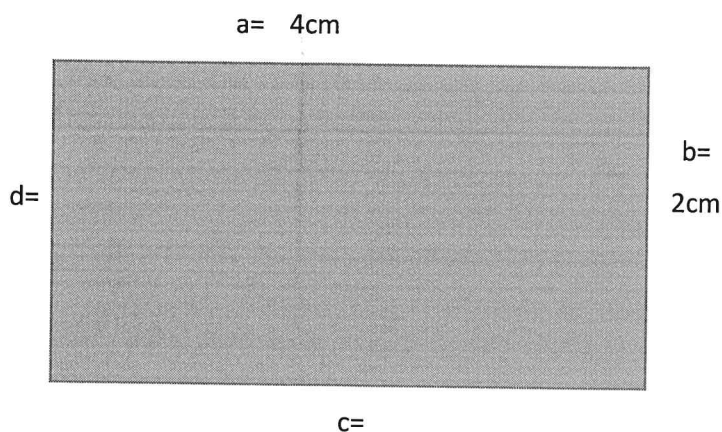
$$1\text{m} = 100\text{cm}$$

$$1\text{km} = 1000\text{m}$$

Tasks – Complete 'Converting decimals lengths to their separated Form

When measuring perimeter remember it is the “distance around the outside of a 2D shape’.

**So if I'm measuring the perimeter of a rectangle with sides 2cm and 4cm I would add the following:**



$$\text{Perimeter} = (a) 4\text{cm} + (b) 2\text{cm} + (c) 4\text{cm} + (d) 2\text{cm} = 12\text{cms}$$



## Week C – Fractions and Decimals

### Learning Intention:

#### Students will:

- + **add and subtract fractions with like denominators**
- + **work out the fraction of a quantity**

When adding or subtracting fractions with like denominators, all we need to do is add or subtract the numerators (top number). The denominator (bottom number) will always stay the same.

$$\text{So: } \frac{3}{8} + \frac{2}{8} = \frac{5}{8}$$

$$\text{And } \frac{5}{8} - \frac{2}{8} = \frac{3}{8}$$

And when working out the fraction of a quantity:

- first divide by the denominator
- then times by the numerator

$$\text{So: } \frac{3}{8} \text{ of } 32 = 32 \div 8 = 4, \text{ then } 4 \times 3 = 12$$

$$\frac{3}{8} \text{ of } 32 = 12$$

## Length – Term 3

Name: \_\_\_\_\_

1. Convert the following decimal lengths to their separated form

**a.** 3.2 m = \_\_\_\_\_m and \_\_\_\_\_cm    **b.** 4.75m = \_\_\_\_m and \_\_\_\_\_cm

**c.** 10.4 m = \_\_\_\_\_m and \_\_\_\_\_cm    **d.** 8.35m = \_\_\_\_m and \_\_\_\_\_cm

**e.** 13.02 m = \_\_\_\_\_m and \_\_\_\_\_cm    **f.** 4.05m = \_\_\_\_m and \_\_\_\_\_cm

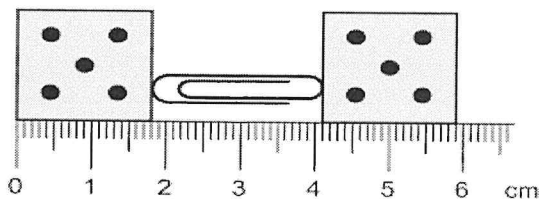
2. Convert the following decimal lengths to their separated form

**a.** 2km and 400m = \_\_\_\_\_km    **b.** 3cm and 4mm = \_\_\_\_\_cm

**c.** 11km and 280m = \_\_\_\_\_km    **d.** 7cm and 5mm = \_\_\_\_\_cm

**e.** 112km and 5m = \_\_\_\_\_km    **f.** 8cm and 1mm = \_\_\_\_\_cm

This picture shows a paperclip between two dice on a ruler.



What is the length of the paperclip?

18 mm

☐

20 mm

☐

23 mm

☐

41 mm

☐

**21** This is a picture of a shoe.



Shade one bubble.



Which of these is closest to the length of a **real** shoe?

5 cm

☐

25 cm

☐

75 cm

☐

100 cm

☐

Name

Date



## PERIMETER OF A RECTANGLE CHALLENGES 1

Work out the perimeter of the following rectangles.

| RECTANGLE  | PERIMETER |
|--|-----------|
| 1) A rectangle measuring 3cm by 4cm.                               | _____ cm  |
| 2) A square with side 5cm.   | _____     |
| 3) A rectangle with sides 5mm and 8mm.                             | _____     |
| 4) A square with sides of 20 m                                     | _____     |
| 5) A rectangle with sides 5cm and 7cm.                             | _____     |
| 6) A rectangle with sides 13 cm and 10 cm.                         | _____     |
| 7) A rectangle with sides 4 cm and 11 cm.                          | _____     |
| 8) A square with sides of 12 cm.                                   | _____     |
| 9) A rectangle with sides 20 mm and 15 mm.                         | _____     |
| 10) A rectangle with sides $3\frac{1}{2}$ cm and $1\frac{1}{2}$ cm | _____     |
| 11) A square with sides $1\frac{1}{2}$ m.                          | _____     |
| 12) A rectangle with sides 45 cm and 55 cm.                        | _____     |
| 13) A rectangle with sides 1m 20cm and 2m 30cm.                    | _____     |
| 14) A square with sides $6\frac{1}{2}$ cm.                         | _____     |

### CHALLENGE

I am a square. My perimeter is 32cm.

How long is each of my sides? \_\_\_\_\_





## Adding fractions (like denominators)

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### Grade 5 Fractions Worksheet

Find the sum.

1.  $\frac{3}{4} + \frac{3}{4} =$  \_\_\_\_\_

2.  $\frac{5}{7} + \frac{6}{7} =$  \_\_\_\_\_

3.  $\frac{16}{25} + \frac{12}{25} =$  \_\_\_\_\_

4.  $\frac{23}{100} + \frac{54}{100} =$  \_\_\_\_\_

5.  $\frac{6}{9} + \frac{1}{9} =$  \_\_\_\_\_

6.  $\frac{8}{10} + \frac{4}{10} =$  \_\_\_\_\_

7.  $\frac{4}{6} + \frac{4}{6} =$  \_\_\_\_\_

8.  $\frac{18}{50} + \frac{42}{50} =$  \_\_\_\_\_

9.  $\frac{13}{20} + \frac{11}{20} =$  \_\_\_\_\_

10.  $\frac{7}{11} + \frac{7}{11} =$  \_\_\_\_\_

11.  $\frac{15}{25} + \frac{7}{25} =$  \_\_\_\_\_

12.  $\frac{4}{7} + \frac{3}{7} =$  \_\_\_\_\_

13.  $\frac{1}{3} + \frac{1}{3} =$  \_\_\_\_\_

14.  $\frac{4}{8} + \frac{3}{8} =$  \_\_\_\_\_

15.  $\frac{2}{5} + \frac{2}{5} =$  \_\_\_\_\_

16.  $\frac{8}{16} + \frac{10}{16} =$  \_\_\_\_\_

17.  $\frac{3}{12} + \frac{6}{12} =$  \_\_\_\_\_

18.  $\frac{1}{2} + \frac{1}{2} =$  \_\_\_\_\_

19.  $\frac{3}{13} + \frac{7}{13} =$  \_\_\_\_\_

20.  $\frac{8}{15} + \frac{11}{15} =$  \_\_\_\_\_

21.  $\frac{3}{14} + \frac{4}{14} =$  \_\_\_\_\_

## Subtracting fractions (like denominators)

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### Grade 5 Fractions Worksheet

Find the difference.

1.  $\frac{14}{15} - \frac{13}{15} =$  \_\_\_\_\_ 2.  $\frac{6}{9} - \frac{5}{9} =$  \_\_\_\_\_ 3.  $\frac{95}{100} - \frac{36}{100} =$  \_\_\_\_\_

4.  $\frac{7}{11} - \frac{4}{11} =$  \_\_\_\_\_ 5.  $\frac{30}{50} - \frac{22}{50} =$  \_\_\_\_\_ 6.  $\frac{6}{12} - \frac{4}{12} =$  \_\_\_\_\_

7.  $\frac{14}{30} - \frac{13}{30} =$  \_\_\_\_\_ 8.  $\frac{19}{25} - \frac{11}{25} =$  \_\_\_\_\_ 9.  $\frac{8}{10} - \frac{7}{10} =$  \_\_\_\_\_

10.  $\frac{9}{20} - \frac{8}{20} =$  \_\_\_\_\_ 11.  $\frac{4}{5} - \frac{2}{5} =$  \_\_\_\_\_ 12.  $\frac{18}{20} - \frac{17}{20} =$  \_\_\_\_\_

13.  $\frac{12}{25} - \frac{8}{25} =$  \_\_\_\_\_ 14.  $\frac{86}{100} - \frac{74}{100} =$  \_\_\_\_\_ 15.  $\frac{48}{50} - \frac{44}{50} =$  \_\_\_\_\_

16.  $\frac{17}{30} - \frac{15}{30} =$  \_\_\_\_\_ 17.  $\frac{17}{18} - \frac{1}{18} =$  \_\_\_\_\_ 18.  $\frac{14}{15} - \frac{9}{15} =$  \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_



## FRACTIONS OF NUMBERS SHEET 4

Use division and multiplication to help you find these fractions.

- |                                 |                                  |                                  |
|---------------------------------|----------------------------------|----------------------------------|
| 1) $\frac{1}{5}$ of 30 = ____   | 2) $\frac{2}{5}$ of 30 = ____    | 3) $\frac{4}{5}$ of 30 = ____    |
| 4) $\frac{1}{6}$ of 24 = ____   | 5) $\frac{5}{6}$ of 24 = ____    | 6) $\frac{1}{10}$ of 40 = ____   |
| 7) $\frac{7}{10}$ of 40 = ____  | 8) $\frac{1}{9}$ of 18 = ____    | 9) $\frac{5}{9}$ of 18 = ____    |
| 10) $\frac{1}{8}$ of 80 = ____  | 11) $\frac{3}{8}$ of 80 = ____   | 12) $\frac{1}{15}$ of 30 = ____  |
| 13) $\frac{6}{15}$ of 30 = ____ | 14) $\frac{1}{3}$ of 45 = ____   | 15) $\frac{2}{3}$ of 45 = ____   |
| 16) $\frac{1}{7}$ of 42 = ____  | 17) $\frac{4}{7}$ of 42 = ____   | 18) $\frac{1}{12}$ of 36 = ____  |
| 19) $\frac{7}{12}$ of 36 = ____ | 20) $\frac{1}{20}$ of 100 = ____ | 21) $\frac{9}{20}$ of 100 = ____ |
| 22) $\frac{1}{5}$ of 45 = ____  | 23) $\frac{3}{5}$ of 45 = ____   | 24) $\frac{4}{5}$ of 45 = ____   |

## CALCULATOR CHALLENGE

Use a calculator to work out these fractions

- |                                 |                                  |                                  |
|---------------------------------|----------------------------------|----------------------------------|
| 1) $\frac{1}{3}$ of 186 = ____  | 2) $\frac{2}{3}$ of 186 = ____   | 3) $\frac{1}{4}$ of 368 = ____   |
| 4) $\frac{3}{4}$ of 168 = ____  | 5) $\frac{1}{9}$ of 378 = ____   | 6) $\frac{5}{9}$ of 378 = ____   |
| 7) $\frac{1}{7}$ of 861 = ____  | 8) $\frac{4}{7}$ of 861 = ____   | 9) $\frac{1}{5}$ of 965 = ____   |
| 10) $\frac{3}{5}$ of 965 = ____ | 11) $\frac{1}{12}$ of 468 = ____ | 12) $\frac{7}{12}$ of 468 = ____ |
- 13) Captain Salamander is out fishing. He manages to catch a total of 335 fish in a single day. But  $\frac{2}{5}$  of the fish manage to escape while he is not looking. How many fish escape? \_\_\_\_\_ How many are left? \_\_\_\_\_



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