

Learning Objective:	To be able to calculate fractions of amounts	Name:	
		Date:	

Do NOW Activity:

- 1 Write down the first 6 **cube numbers**
- 2 Work out $112.4 - 15.93$
- 3 Work out $-3 - -7$
- 4 Work out 58×35
- 5 Work out 0.11×0.8

PRIOR KNOWLEDGE CHECK:

1. I am able to multiply and divide integers

THE MAIN EVENT

WORKED EXAMPLE #1:

Find $\frac{1}{8}$ of 72

$$\frac{72}{8} = 9$$

PRACTICE #1:

Question 1: Work out each of the following

- | | | | |
|-------------------------|---------------------------|--------------------------|---------------------------|
| (a) $\frac{1}{2}$ of 10 | (b) $\frac{1}{3}$ of 18 | (c) $\frac{1}{5}$ of 20 | (d) $\frac{1}{4}$ of 24 |
| (e) $\frac{1}{9}$ of 27 | (f) $\frac{1}{10}$ of 160 | (g) $\frac{1}{8}$ of 80 | (h) $\frac{1}{7}$ of 49 |
| (i) $\frac{1}{2}$ of 9 | (j) $\frac{1}{5}$ of 65 | (k) $\frac{1}{12}$ of 72 | (l) $\frac{1}{11}$ of 132 |

WORKED EXAMPLE #2:

Find $\frac{5}{6}$ of 72

$$\frac{1}{6} \text{ of } 72 = \frac{72}{6} = 12$$

$$\frac{5}{6} \text{ of } 72 = 12 \times 5 = 60$$

PRACTICE #2:

Question 2: Work out each of the following

- | | | | |
|-------------------------|---------------------------|-------------------------|---------------------------|
| (a) $\frac{2}{3}$ of 15 | (b) $\frac{7}{10}$ of 20 | (c) $\frac{2}{5}$ of 30 | (d) $\frac{3}{4}$ of 32 |
| (e) $\frac{3}{5}$ of 45 | (f) $\frac{2}{7}$ of 28 | (g) $\frac{3}{8}$ of 88 | (h) $\frac{3}{10}$ of 120 |
| (i) $\frac{5}{9}$ of 63 | (j) $\frac{13}{20}$ of 60 | (k) $\frac{2}{7}$ of 91 | (l) $\frac{4}{15}$ of 120 |

PRACTICE #3:

Question 3: Work out each of the following.
Include suitable units.

- (a) $\frac{1}{3}$ of £21 (b) $\frac{3}{4}$ of 100kg (c) $\frac{2}{3}$ of 27cm (d) $\frac{7}{8}$ of 32 seconds
- (e) $\frac{1}{8}$ of 50cm (f) $\frac{1}{5}$ of 4931km (g) $\frac{3}{4}$ of £57 (h) $\frac{2}{9}$ of 211km

APPLICATION

Question 1: James has 20 sweets.

$\frac{3}{4}$ of the sweets are red.

How many sweets are red?



Question 2: In a class, there are 24 students.

$\frac{1}{8}$ of the students wear glasses.

How many students wear glasses?

Question 3: There are 40 apples in a crate.

$\frac{3}{5}$ of the apples are bad.

How many good apples are there?



Question 4: On Wednesday, James slept for $\frac{3}{8}$ of the day

(a) How many hours did James spend sleeping?

(b) For how many hours was James awake?

(c) What fraction of the day was James awake?



Question 5: Declan won £6000 in a competition.

He invests $\frac{2}{5}$ of the money.

How much money did Declan invest?

Question 6: Katie has £1200.

She gives $\frac{1}{3}$ of the money to her sister.

Then Katie gives $\frac{1}{4}$ of the remaining money to her brother.

How much money does Katie have left?