

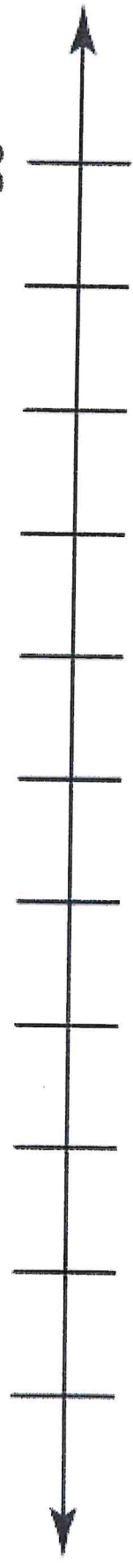
Monday 22/2/21

Independent Task

Question 1 and 2

1. Locate the number.
2. Decide which is the nearer multiple of 10 and write in the answer.

$78 \approx$
70



$322 \approx$
320



Independent Task

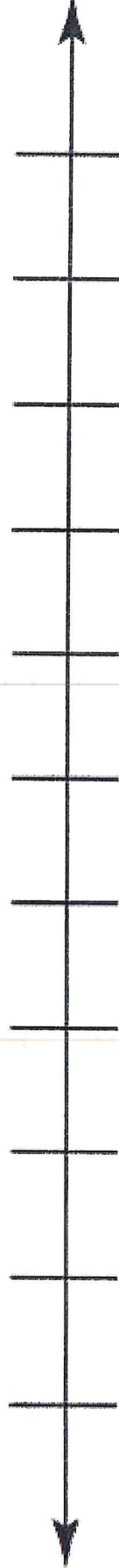
Question 3 and 4

1. Using the number lines, write in the two closest multiples of 10.
2. Locate the number.
3. Decide which is the nearer multiple of 10 and write in the answer.

$$735 \approx$$



$$9289 \approx$$



Independent Task

Question 5 and 6

1. Using the number lines, write in the two closest multiples of 10.
2. Locate the number.
3. Decide which is the nearer multiple of 10 and write in the answer.

1119 \approx



7656 \approx



Independent Task

Challenge

I've rounded a number to the nearest 10, my answer is 2830.

What could my number have been?



Monday / Tuesday

Rounding to the nearest 10 or 100

Round any number to the nearest 10 or 100



challenge 1

1 Write the two multiples of 10 that each number comes between on either side of the number.

- a 147 b 189 c 231 d 358
e 725 f 866 g 673 h 744

2 Now look at the 1s digit and decide whether the number should be rounded up or down. Circle the correct multiple of 10.

challenge 2

1 Write the two multiples of 10 that each number comes between on either side of the number.

- a 875 b 749 c 1837 d 2568 e 2371

2 Now look at the 1s digit and decide whether the number should be rounded up or down. Circle the correct multiple of 10.

3 Write the two multiples of 100 that each number comes between on either side of the number.

- a 765 b 353 c 287 d 915 e 1528

4 Look at the 10s digit and decide whether the number should be rounded up or down. Circle the correct multiple of 100.

challenge 3

1 Write the multiples of 10 and 100 that these numbers come between on either side of the number. Then circle the multiple of 10 and 100 that the number rounds to.

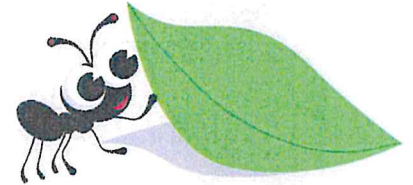
- a 2716 b 3569 c 3248 d 4635 e 7482 f 7255

2 Explain the rules for rounding numbers.

Example

460 ← 468 → 470

460 ← 468 → 470



Example

400 ← 468 → 500

400 ← 468 → 500

Example

5470 ← 5473 → 5480
5400 ← 5473 → 5500

Tuesday 23/2/21

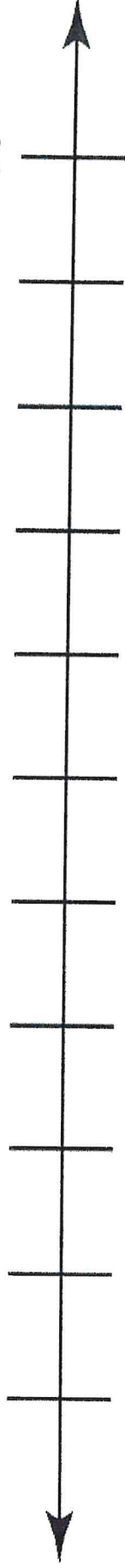
Independent Task

Question 1 and 2

1. Locate the number.
2. Decide which is the nearer multiple of 100 and write in the answer.

$62 \approx$

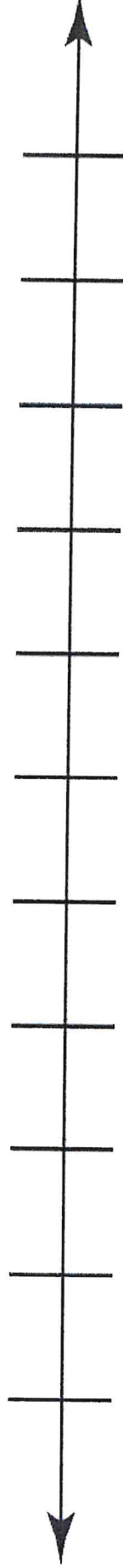
0



$807 \approx$

800

900

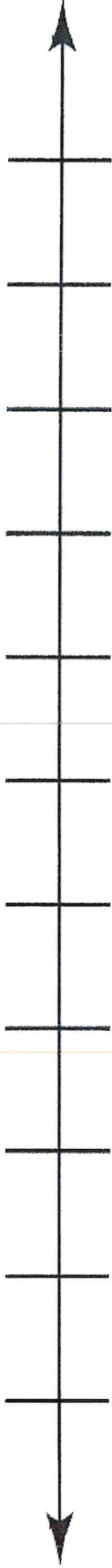


Independent Task

Question 3 and 4

1. Using the number lines, write in the two closest multiples of 100.
2. Locate the number.
3. Decide which is the nearer multiple of 100 and write in the answer.

7059 \approx



3655 \approx

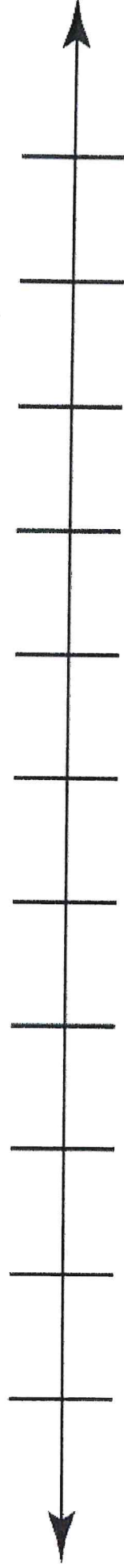


Independent Task

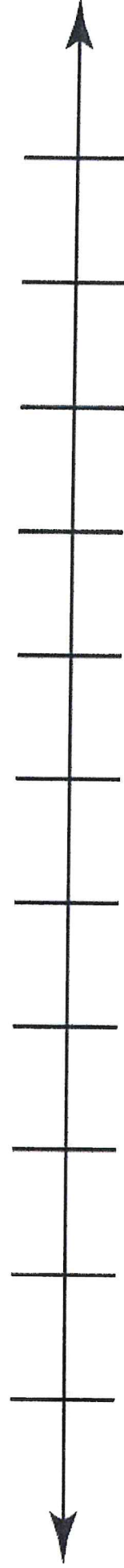
Question 5 and 6

1. Using the number lines, write in the two closest multiples of 100.
2. Locate the number.
3. Decide which is the nearer multiple of 100 and write in the answer.

2850 \approx



9264 \approx



Independent Task

Challenge

Round **5297** to the nearest **10**.

Round it to the nearest **100**.

What do you notice?

Can you suggest other numbers like this?

Why does this happen?



Wednesday 24/2/21

Independent Task

Question 1 and 2

1. Locate the number.
2. Decide which is the nearer multiple of 1000 and write in the answer.

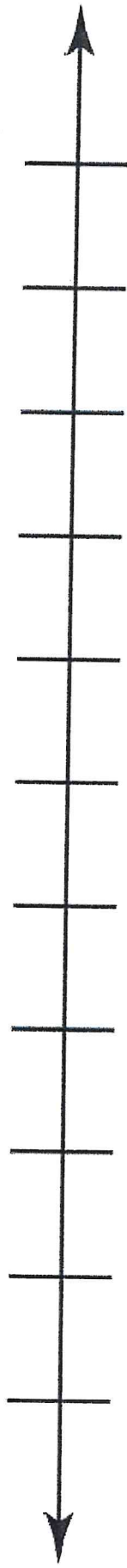
4932 \approx

4000



532 \approx

0

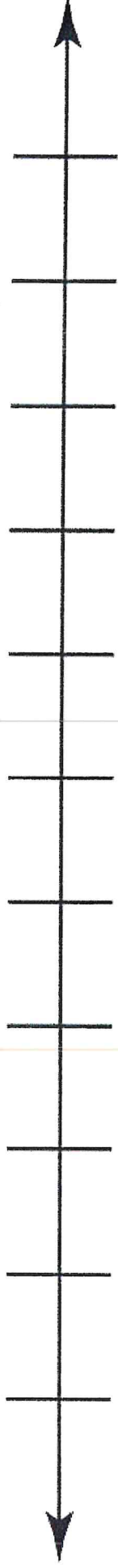


Independent Task

Question 3 and 4

1. Using the number lines, write in the two closest multiples of 1000.
2. Locate the number.
3. Decide which is the nearer multiple of 1000 and write in the answer.

7623 \approx



3500 \approx



Independent Task

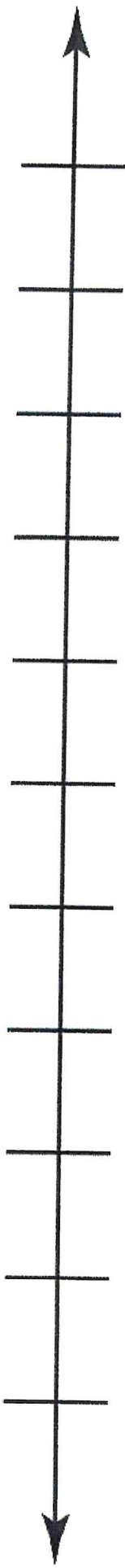
Question 5 and 6

1. Using the number lines, write in the two closest multiples of 1000.
2. Locate the number.
3. Decide which is the nearer multiple of 1000 and write in the answer.

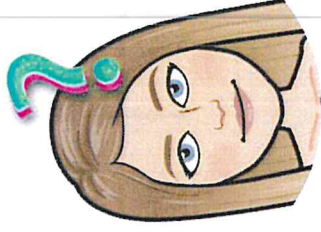
6498 \approx



3009 \approx



Independent Task



Challenge

I have **4** number cards

I add **two** of the numbers together, and round this number to the nearest **1000**.

My answer is **6000**.

Which two cards could I have chosen?

1400	2400
3400	4400



Wednesday



Rounding to the nearest 10, 100 or 1000

Round any number to the nearest 10, 100 or 1000

1 Write the two multiples of 10 that each number comes between on either side of the number.

a 614

b 789

c 865

d 1362

e 1718

f 2064

g 2637

h 3525

Example
1230 ← 1236 → 1240

2 Circle the multiple of 10 that the number rounds to.

1 Write the two multiples of 100 that each number comes between on either side of the number.

a 2189

b 3577

c 6252

d 7808

e 9458

2 Now look at the 10s digit and decide whether the number should be rounded up or down. Circle the correct multiple of 100.

3 Write the two multiples of a 1000 that each number comes between on either side of the number.

a 2768

b 3289

c 4890

d 4178

e 5098

f 5318

g 6588

h 6982

i 7437

j 9534

Example
4000 ← 4628 → 5000

4 Circle the multiple of 1000 that the number rounds to.

1 Write the multiples of 100 and 1000 that each number comes between, on either side of the number.

a 4572

b 4138

c 5269

d 4731

e 5934

f 6495

g 7065

h 8472

Example
3700 ← 3725 → 3800
3000 ← 3725 → 4000

2 Circle the multiples of 100 and 1000 that the number rounds to.

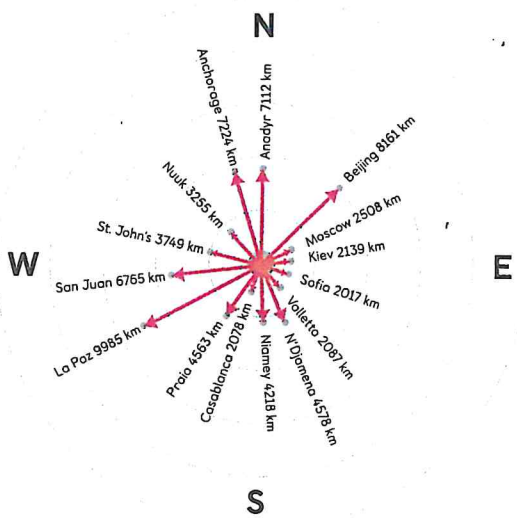
3 Explain the rules for rounding numbers to the nearest 1000.



Thursday 25/2/21

Lesson
12

In Focus



Niamey is about
4200 km from London.



Niamey is about
4220 km from London.

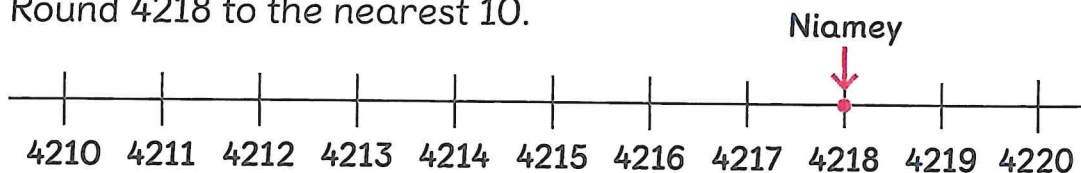


Who is correct?

Is it possible that both of them are correct?

Let's Learn

1 Round 4218 to the nearest 10.



4218 is between 4210 and 4220.

4218 is closer to 4220 than to 4210.

4218 is 4220 when rounded to the nearest 10.

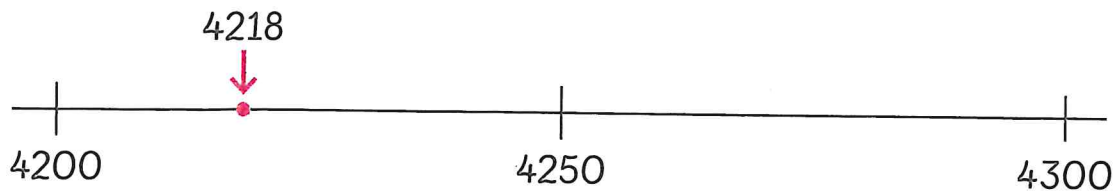


4218 is approximately equal to 4220.

We write $4218 \approx 4220$ (to the nearest 10).

The sign \approx means
approximately equal to.

2 Round 4218 to the nearest 100.



4218 is between 4200 and 4300.

4218 is closer to 4200 than to 4300.
4218 is 4200 when rounded to the nearest 100.



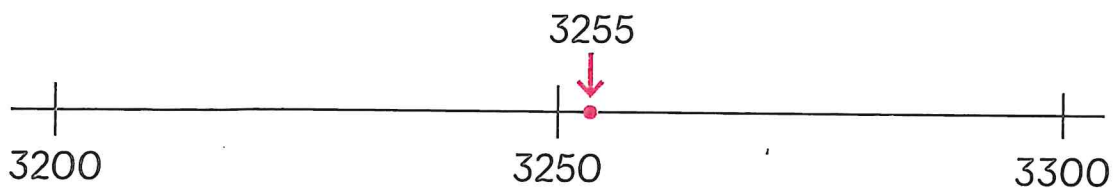
We write $4218 \approx 4200$ (to the nearest 100).

3 $4218 \approx$ (to the nearest 1000)

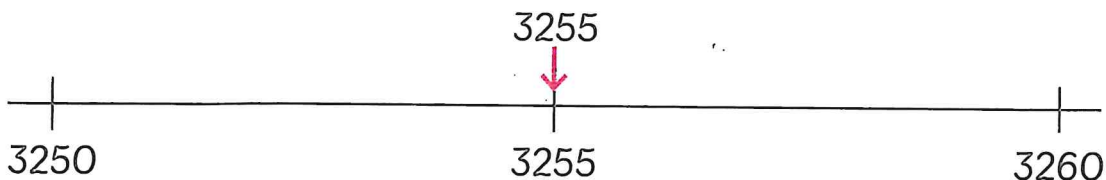
$4218 \approx$ (to the nearest 100)

$4218 \approx$ (to the nearest 10)

4 Nuuk is 3255 km from London.



$3255 \approx 3300$ (to the nearest 100)



3255 is exactly halfway between 3250 and 3260.



$3255 \approx 3260$ (to the nearest 10)

5 Round 1250 to the nearest 100.

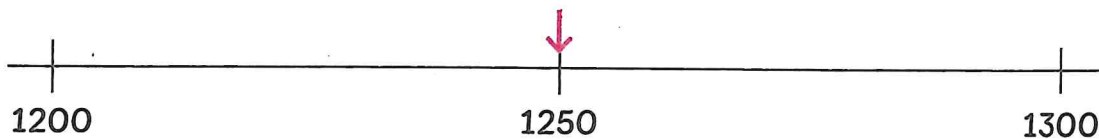
1250



It is between 1200 and 1300.

It is exactly halfway between 1200 and 1300.

Is it closer to 1200 or to 1300?

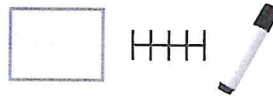


$1250 \approx 1300$ (to the nearest 100)

Activity Time

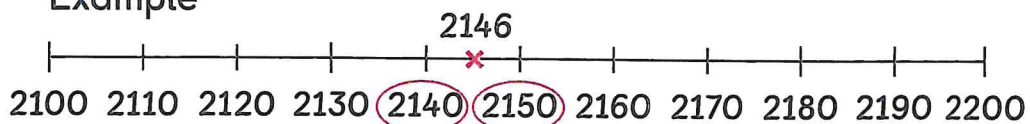
Work in pairs.

What you need:



- ① Think of a 4-digit number.
- ② Get your partner to write down and mark out the number on the number line.
- ③ Circle the numbers that lie on either side of the number. Decide which ten is closer to the number and round it off to the nearest ten.

Example



$2146 \approx 2150$

2146 is between 2140 and 2150.

2150 is closer to 2146.



- ④ Switch roles and repeat ① to ③.

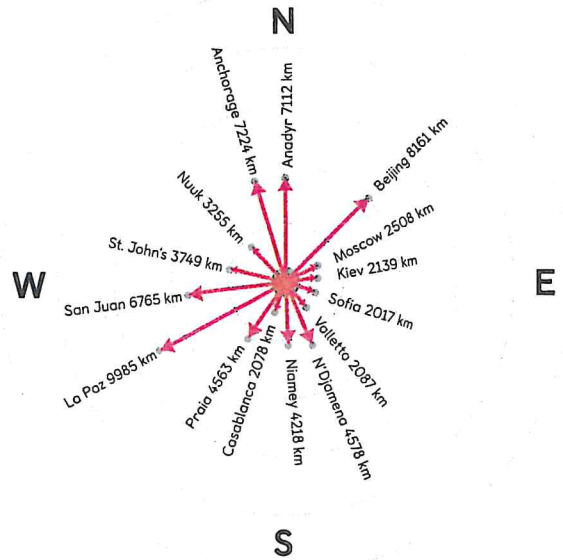
Guided Practice

- 1 Give the distance between London and Kiev.

It is 2139 km.



Give your answer to the nearest 10 km and 100 km.



Is it 2130 km or 2140 km to the nearest 10 km?



Is it 2100 km or 2200 km to the nearest 100 km?

- 2 London is 2017 km from Sofia.

2017 \approx (to the nearest 10)

2017 \approx (to the nearest 100)

2017 \approx (to the nearest 1000)

- 3 La Paz is 9985 km from London.

9985 \approx (to the nearest 10)

9985 \approx (to the nearest 100)

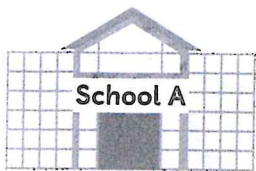
9985 \approx (to the nearest 1000)

Name: _____ Class: _____ Date: _____

Worksheet 12

Rounding Numbers

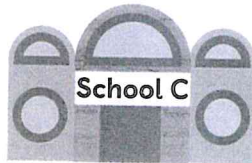
1 The number of books in the libraries of some schools are shown.



2896 books



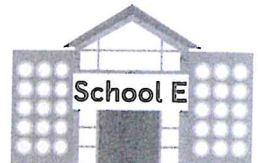
6257 books



3921 books



8763 books



7048 books

(a) How many books are there in the libraries of School A and School B?
Give your answers to the nearest 100.

School A

School B

(b) In one school's library there are 7000 books after rounding to the nearest 1000.

Which school is that?

(c) In one school's library the number of books is the same after rounding to the nearest 10 and to the nearest 100.

Which school is that?

2 Complete the table.

Number	Rounding to nearest 10	Rounding to nearest 100	Rounding to nearest 1000
6543			
3751			
2033			
4545			
6004			

I can round numbers to the nearest 10 and 100 and money to the nearest pound and I can use rounding to estimate an answer.

Examples

To NEAREST 10

Look at the units.

5 or more, round up.

Below 5, round down.

138 rounds to 140

134 rounds to 130

To NEAREST 100

Look at 10s and units.

50 or more, round up.

Below 50, round down.

374 rounds to 400

1620 rounds to 1600

APPROXIMATING

$$125 + 43 \rightarrow 130 + 40 \rightarrow 170$$

$$29 \times 3 \rightarrow 30 \times 3 \rightarrow 90$$

$$893 - 216 \rightarrow 900 - 200 \rightarrow 700$$

$$£3.74 \times 5 \rightarrow £4 \times 5 \rightarrow £20$$

A

Round to the nearest 10.

- | | |
|------|-------|
| 1 21 | 6 51 |
| 2 35 | 7 78 |
| 3 47 | 8 42 |
| 4 83 | 9 26 |
| 5 69 | 10 97 |

Round to the nearest 100.

- | | |
|--------|--------|
| 11 230 | 16 880 |
| 12 370 | 17 790 |
| 13 450 | 18 540 |
| 14 620 | 19 360 |
| 15 910 | 20 650 |

Round to the nearest pound.

- | | |
|----------|----------|
| 21 £2.70 | 26 £6.40 |
| 22 £8.50 | 27 £3.60 |
| 23 £5.20 | 28 £2.10 |
| 24 £1.80 | 29 £7.90 |
| 25 £9.30 | 30 £4.80 |

B

Approximate by rounding to the nearest 10.

- | | |
|--------------|------------------|
| 1 $62 + 57$ | 6 39×2 |
| 2 $49 + 78$ | 7 32×3 |
| 3 $128 - 31$ | 8 18×5 |
| 4 $92 - 49$ | 9 21×4 |
| 5 $153 - 64$ | 10 47×6 |

Approximate by rounding to the nearest 100.

- | |
|-----------------|
| 11 $360 + 440$ |
| 12 $420 + 290$ |
| 13 $850 - 270$ |
| 14 $490 - 160$ |
| 15 $1130 - 580$ |

Approximate by rounding to the nearest pound.

- | |
|---------------------|
| 16 $£4.60 \times 3$ |
| 17 $£9.20 \times 5$ |
| 18 $£2.84 \times 7$ |
| 19 $£5.17 \times 2$ |
| 20 $£7.50 \times 6$ |

C

Copy the sentences, writing the numbers to the nearest 1000, with the word 'about'.

- 2813 patients were treated at the hospital.
- The supermarket sold 1479 bottles of wine.
- 135 268 people live in the town.
- There are 29 500 books in the library.

Approximate by rounding to the nearest 10.

- $129 + 133$
- $608 + 199$
- $552 - 347$
- $743 - 126$

Approximate by rounding to the nearest pound.

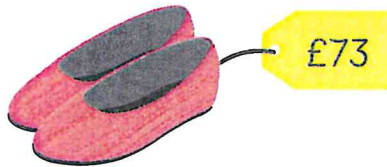
- $£14.92 \times 6$
- $£23.27 \times 8$
- $£13.56 \times 4$
- $£38.83 \times 5$

Friday 26/2/21

Lesson
13

Rounding Numbers to Estimate

In Focus



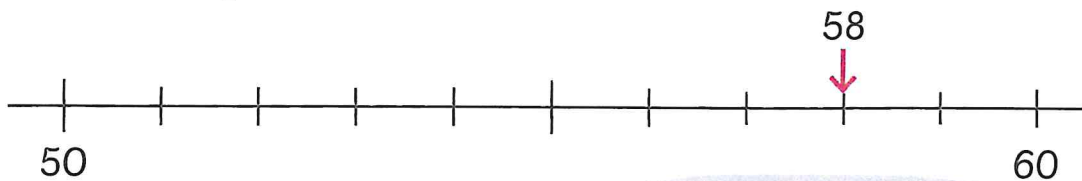
Ravi's mother went shopping.

She bought a handbag for £58, a pair of shoes for £73 and a dress for £35.

Estimate the total cost of these three items.

Let's Learn

- 1 The handbag cost £58.



58 is between 50 and 60.

58 is closer to 60 than to 50.

58 is approximately equal to 60.

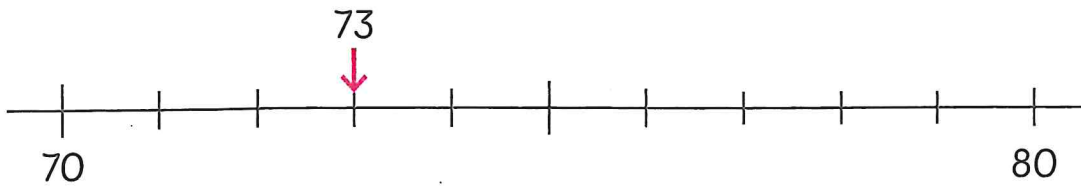
$58 \approx 60$ (to the nearest 10)

The handbag cost about £60.

The sign \approx means approximately equal to.



2 The shoes cost £73.



73 is between 70 and 80.

73 is closer to 70 than to 80.

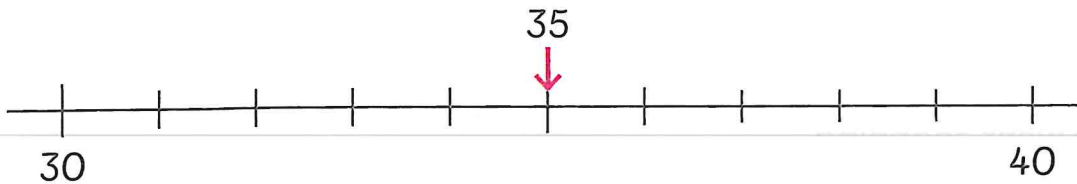
73 \approx (to the nearest 10)

The shoes cost about £ .

To round a number to the nearest 10, look at the digit in the ones place.



3 The dress cost £35.



35 is exactly halfway between 30 and 40.

We round 35 up so it is approximately 40.

35 \approx 40 (to the nearest 10)

The dress cost about £40.

We round a number down when the digit in the ones place is less than 5.



We round a number up when the digit in the ones place is 5 or greater.

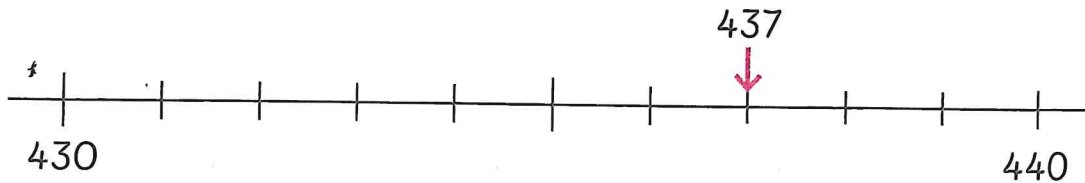
$$£60 + £40 + £70 = £170$$

The three things cost approximately £170.



Guided Practice

1 Round 437 to the nearest 10.

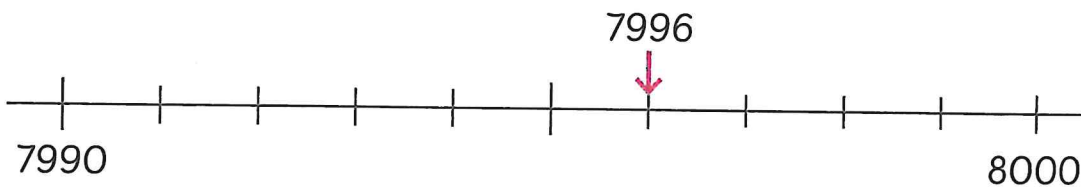


437 is between 430 and 440.

437 is closer to than to .

437 \approx (to the nearest 10)

Round 7996 to the nearest 10.



7996 is between 7990 and 8000.

7996 is closer to than to .

7996 \approx (to the nearest 10)

Estimate $437 + 7996$.



2 Round each number to the nearest 10.

63 \approx

967 \approx

6555 \approx



Estimate $967 - 63$.

Estimate $967 + 63$.

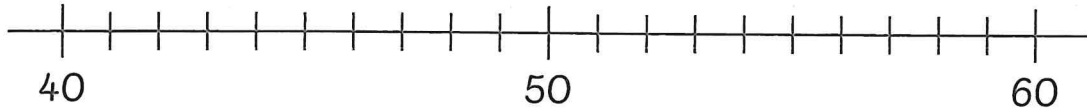


3 A whole number rounded to the nearest 10 is 50.

What could the whole number be?

- (a) What are the possible answers?
- (b) What is the smallest number possible?
- (c) What is the greatest number possible?

Use the number line to help you.



4 Elliott estimates a sum this way:

$$26 + 72 \approx 30 + 70 \\ = 100$$

Start by rounding each number to the nearest 10.

Use Elliott's method to estimate the sum.

$$642 + 93 \approx \boxed{} + \boxed{} \\ = \boxed{}$$



5 Hannah estimates the difference this way:

$$98 - 42 \approx 100 - 40 \\ = 60$$

Use Hannah's method to estimate the difference.

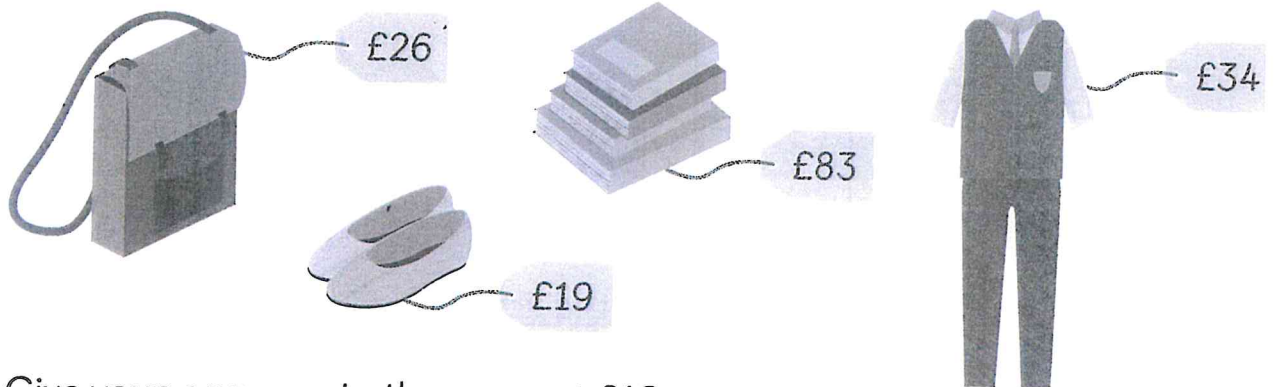
$$472 - 128 \approx \boxed{} - \boxed{} \\ = \boxed{}$$

Name: _____ Class: _____ Date: _____

Worksheet 13

Rounding Numbers to Estimate

1 Fill in the blanks.



Give your answers to the nearest £10.

- (a) The cost of a school bag is about .
- (b) The cost of a pair of shoes is about .
- (c) The cost of a school uniform is about .
- (d) The cost of the textbooks is about .
- (e) The total cost of all the items is about .

2 A whole number rounded to the nearest 10 is 430.

(a) Which whole numbers could it be?

(b) Which is the greatest of these possible numbers?

(c) Which is the smallest of these possible numbers?

- 3 Sam estimates the sum of two numbers by rounding to the nearest 10.

$$\begin{aligned} 52 + 37 &\approx 50 + 40 \\ &= 90 \end{aligned}$$



Use Sam's method to estimate the sums below.

(a) $94 + 26 \approx$ $+$
=

(b) $123 + 81 \approx$ $+$
=

(c) $97 + 68 \approx$ $+$
=

- 4 Lulu estimates the difference between two numbers by rounding to the nearest 10.

$$\begin{aligned} 83 - 59 &\approx 80 - 60 \\ &= 20 \end{aligned}$$



Use Lulu's method to estimate the differences below.

(a) $77 - 28 \approx$ $-$
=

(b) $104 - 67 \approx$ $-$
=

(c) $683 - 496 \approx$ $-$
=