

Grade 5 - Reading, Comparing and Rounding Decimals - Answer Key

Common Core 5.NBT.A.3, 5.NBT.A.4 · maths-pdf.fr/en/

This answer key shows how each of the 20 decimal problems is solved. For comparing, the key writes decimals with the same number of places. For rounding, it names the digit to the right of the rounding place. Compare your steps with these, not only your answers.

Grade 5 · Common Core State Standards: **5.NBT.A.3, 5.NBT.A.4**

Exercise 1 - Decimals to words

- (a) **six tenths**
- (b) **nine hundredths**
- (c) **two hundred fifteen thousandths**
- (d) **four and seven hundredths**

Exercise 2 - Words to decimals

- (a) **5.12**
- (b) **0.304**
- (c) **0.8**
- (d) 6 thousandths needs three decimal places: **21.006**

Exercise 3 - Value of a digit

In 4.371 the 7 is in the hundredths place. Its value is 0.07.

In 8.005 the 5 is in the thousandths place. Its value is 0.005.

Answer: 0.07 **and** 0.005

Tens	Ones		Tenths	Hundredths	Thousandths
	4	.	3	7	1

The 7 is in the hundredths place.

Exercise 4 - Expanded form with fractions

3 ones, 4 tenths, 8 hundredths and 2 thousandths.

$$3 \times 1 + 4 \times \frac{1}{10} + 8 \times \frac{1}{100} + 2 \times \frac{1}{1000}$$

Exercise 5 - Expanded form with decimals

5 ones, 1 tenth, 2 hundredths, 6 thousandths.

$$5 + 0.1 + 0.02 + 0.006$$

Exercise 6 - Expanded form to standard form

(a) 4 tens, 2 ones, 3 tenths, 0 hundredths, 6 thousandths: **42.306**

(b) 9 ones, 0 tenths, 7 hundredths: **9.07**

Exercise 7 - Compare with symbols

(a) 0.45 and 0.50: 45 hundredths is less than 50 hundredths. $0.45 < 0.5$

(b) $3.2 = 3.20$. =

(c) 0.308 and 0.380: 308 is less than 380 thousandths. <

(d) 12.09 and 12.10: <

Exercise 8 - Compare more decimals

(a) 6.071 and 6.070: >

(b) 0.90 and 0.09: >

(c) 5.550 and 5.505: $>$

(d) 0.70 and 0.07: $>$

Exercise 9 - Order decimals

Write each with three places: 0.620, 0.600, 0.062, 0.602, 0.260.

Compare: $0.062 < 0.260 < 0.600 < 0.602 < 0.620$.

Answer: 0.062, 0.260, 0.600, 0.602, 0.620



The numbers in order.

Exercise 10 - Round to the whole number

(a) Tenths digit 4, round down: **6**

(b) Tenths digit 5, round up: **13**

(c) Tenths digit 8, round up: **1**

(d) Tenths digit 5, round up: **10**

Exercise 11 - Round to the tenth

(a) Hundredths digit 7: **3.5**

(b) Hundredths digit 2: **0.8**

(c) Hundredths digit 5: 5.9 rounds up to **6.0**

(d) Hundredths digit 4: **12.0**

Exercise 12 - Round to the hundredth

- (a) Thousandths digit 8: **4.64**
- (b) Thousandths digit 5: **0.08**
- (c) Thousandths digit 4: **9.99**
- (d) Thousandths digit 5: **2.31**

Exercise 13 - Round to the thousandth

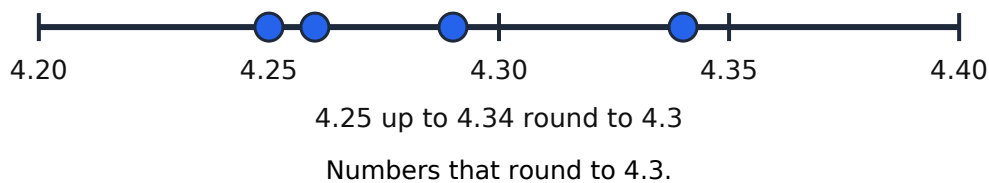
- (a) Ten-thousandths digit 5: **3.142**
- (b) Ten-thousandths digit 4: **0.082**
- (c) 7.9996: the digit 6 rounds the 9 up, which carries: **8.000**

Exercise 14 - Which round to 4.3?

Numbers from 4.25 up to but not including 4.35 round to 4.3.

4.25: yes. 4.34: yes. 4.26: yes. 4.35: no, it rounds up to 4.4. 4.29: yes.

Answer: 4.25, 4.34, 4.26, 4.29



Exercise 15 - 60-yard dash

Write 8.4 as 8.40. Compare 8.37 and 8.40: 8.37 is less.

A lower time is faster, so **Jamal** is faster.

Exercise 16 - Gas price

Nearest cent: the thousandths digit is 9, so round 3.49 up to 3.50.

Nearest dollar: the tenths digit is 4, so round down to 3.

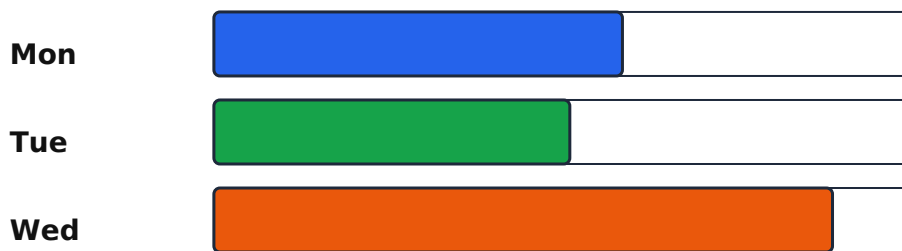
Answer: \$3.50 **and** \$3

Exercise 17 - Rainfall

Write all as thousandths: 0.350, 0.305, 0.530.

$305 < 350 < 530$.

Answer: **Tuesday, Monday, Wednesday**



Tuesday least, Wednesday most.

Exercise 18 - Pumpkin weight

Nearest tenth: the hundredths digit is 4, so keep 12.8.

Nearest pound: the tenths digit is 8, so round up to 13.

Answer: **12.8 lb and 13 lb**

Exercise 19 - Ethan's mistake

Ethan compared 6 and 58 as whole numbers, but the places are different. Write 0.6 as 0.60.

60 hundredths is greater than 58 hundredths, so $0.6 > 0.58$.

Answer: **0.6 is greater**

Exercise 20 - Flour bags

(a) Write with three places: 2.500, 2.050, 2.550, 2.505. Heaviest to lightest: 2.550, 2.505, 2.500, 2.050. 2.55, 2.505, 2.5, 2.05

(b) 2.55 has hundredths digit 5, round up: **2.6 lb**

(c) 2.5 stays 2.5. 2.505 has hundredths digit 0, so it is 2.5. 2.05 rounds to 2.1 and 2.55 to 2.6.
2.5 lb and 2.505 lb