

GRADE 7

Decimals & Operations

Complete Decimal Practice Pack

6 Worksheets • Place Value • Operations • Applications • Reasoning

Worksheet 1 — Place Value & Comparing Decimals

Instructions: Align decimal points carefully. Show your working and check whether your answer is reasonable.

1. Write 7.40518 in words.
2. What is the value of the digit 7 in 42.7186?
3. Write 8.30605 in expanded form.
4. Compare using $>$, $<$ or $=$: 5.708 ____ 5.78.
5. Arrange from least to greatest: 3.07, 3.7, 3.007, 3.70, 3.077.
6. Round 48.3764 to the nearest tenth.
7. Round 0.00876 to the nearest thousandth.
8. Write a decimal between 4.56 and 4.57 that is exactly halfway between them.

Answer Key — Place Value & Comparing Decimals

1. Seven and forty thousand five hundred eighteen hundred-thousandths.
2. 0.7.
3. $8 + 0.3 + 0.006 + 0.00005$.
4. $<$
5. 3.007, 3.07, 3.077, 3.7, 3.70.
6. 48.4.
7. 0.009.
8. 4.565.

Worksheet 2 — Adding & Subtracting Decimals

Instructions: Align decimal points carefully. Show your working and check whether your answer is reasonable.

1. $18.75 + 6.408$

2. $42.6 - 18.975$

3. $7.035 + 14.82 + 0.906$

4. $100 - 37.648$

5. $8.5 - 2.763 - 1.24$

6. A student runs 4.75 km on Monday, 5.6 km Tuesday and 3.825 km Wednesday. Find the total distance.

7. A shop has \$250.00. It spends \$84.75, \$37.60 and \$46.95. How much remains?

8. Find x : $x + 7.825 = 15.4$.

Answer Key — Adding & Subtracting Decimals

1. 25.158
2. 23.625
3. 22.761
4. 62.352
5. 4.497
6. 14.175 km
7. \$80.70
8. $x = 7.575$.

Worksheet 3 — Multiplying Decimals

Instructions: Align decimal points carefully. Show your working and check whether your answer is reasonable.

1. 4.8×3.5

2. 0.75×2.4

3. 6.25×1.6

4. 12.04×0.7

5. 3.08×2.05

6. A rectangular garden is 4.5 m long and 2.8 m wide. Find its area.

7. One notebook costs \$2.75. What is the cost of 18 notebooks?

8. A machine produces 12.5 kg of material per hour. How much does it produce in 7.2 hours?

Answer Key — Multiplying Decimals

1. 16.8
2. 1.8
3. 10
4. 8.428
5. 6.314
6. 12.6 m²
7. \$49.50
8. 90 kg.

Worksheet 4 — Dividing Decimals

Instructions: Align decimal points carefully. Show your working and check whether your answer is reasonable.

1. $18.9 \div 3$

2. $7.56 \div 0.6$

3. $45.6 \div 1.2$

4. $9.375 \div 2.5$

5. $0.84 \div 0.07$

6. A 15.75 m ribbon is cut into pieces of 0.75 m. How many pieces are made?

7. A tank contains 42.5 L and is poured equally into 5 containers. How much goes into each?

8. Find x : $x \div 0.4 = 18.5$.

Answer Key — Dividing Decimals

1. 6.3
2. 12.6
3. 38
4. 3.75
5. 12
6. 21 pieces
7. 8.5 L
8. $x = 7.4$.

Worksheet 5 — Decimal Applications & Estimation

Instructions: Align decimal points carefully. Show your working and check whether your answer is reasonable.

1. Estimate 48.7×6.2 by rounding each factor to the nearest whole number.
2. Estimate $397.8 \div 19.6$ using compatible numbers.
3. A jacket costs \$84.95 and tax is \$6.80. Find the total cost.
4. A car uses 7.5 L of fuel per 100 km. How much fuel is used over 360 km?
5. A 12.5 kg bag of rice is divided equally into 0.5 kg packets. How many packets?
6. A runner's times are 12.8 s, 13.05 s and 12.75 s. Find the total time.
7. A shop gives \$20 change from a \$100 note after a purchase. The price was \$79.35. Is the change correct? Explain.
8. A student says $4.8 \times 0.25 = 12$. Is the answer reasonable? Find the correct answer.

Answer Key — Decimal Applications & Estimation

1. About $49 \times 6 = 294$.
2. About $400 \div 20 = 20$.
3. \$91.75.
4. 27 L.
5. 25 packets.
6. 38.60 s.
7. No; correct change is \$20.65.
8. No; 0.25 is one-quarter, so $4.8 \times 0.25 = 1.2$.

Worksheet 6 — Decimal Challenge

Instructions: Align decimal points carefully. Show your working and check whether your answer is reasonable.

1. Find x : $3.75x = 18.75$.
2. A number is divided by 0.25 and the result is 36. Find the number.
3. Find the missing number: $5.6 \times \blacksquare = 42$.
4. A rectangle has area 38.72 m^2 and width 4.8 m. Find its length.
5. A price is increased from \$48.00 to \$54.72. Find the increase and the percentage increase.
6. A 6.4 km route is completed in 0.8 hours. Find the average speed in km/h.
7. Find two decimals whose sum is 10 and product is 24.
8. A student calculates $12.5 \div 0.05 = 2.5$. Explain the error and give the correct answer.

Answer Key — Decimal Challenge

1. $x = 5$.
2. 9.
3. 7.5.
4. $8.0\overline{6}$ m = $8\frac{1}{15}$ m.
5. Increase \$6.72; percentage increase 14%.
6. 8 km/h.
7. 4 and 6.
8. Correct answer is 250. Dividing by 0.05 is equivalent to multiplying by 20.